

From the Christian Remembrancer.

Jane Eyre: an Autobiography. By CURRER BELL.
Second Edition. Smith, Elder and Co., Cornhill.

SINCE the publication of "Grantley Manor" no novel has created so much sensation as "Jane Eyre." Indeed, the public taste seems to have outstripped its guides in appreciating the remarkable power which this book displays. For no leading review has yet noticed it, and here we have before us the second edition. The name and sex of the writer are still a mystery. Currer Bell (which by a curious Hibernicism appears in the title-page as the name of a female autobiographer) is a mere *nom de guerre*—perhaps an anagram. However, we, for our part, cannot doubt that the book is written by a female, and, as certain provincialisms indicate, by one from the North of England. Who, indeed, but a woman could have ventured, with the smallest prospect of success, to fill three octavo volumes with the history of a woman's heart? The hand which drew Juliet and Miranda would have shrunk from such a task. That the book is readable, is to us almost proof enough of the truth of our hypothesis. But we could accumulate evidences to the same effect. Mr. Rochester, the hero of the story, is as clearly the vision of a woman's fancy, as the heroine is the image of a woman's heart. Besides, there are many minor indications of a familiarity with all the mysteries of female life which no man can possess, or would dare to counterfeit. Those who have read Miss Edgeworth's *Montem*, and know how a lady paints the social nature of boys and the doings of boys' schools, may judge *e converso* what work a man would have made of the girls' school in the first volume of *Jane Eyre*. Yet we cannot wonder that the hypothesis of a male author should have been started, or that ladies especially should still be rather determined to uphold it. For a book more unfeminine, both in its excellences and defects, it would be hard to find in the annals of female authorship. Throughout there is masculine power, breadth and shrewdness, combined with masculine hardness, coarseness, and freedom of expression. Slang is not rare. The humor is frequently produced by a use of Scripture, at which one is rather sorry to have smiled. The love-scenes glow with a fire as fierce as that of Sappho, and somewhat more fuliginous. There is an intimate acquaintance with the worst parts of human nature, a practised sagacity in discovering the latent ulcer, and a ruthless rigor in exposing it, which must command our admiration, but are almost startling in one of the softer sex. *Jane Eyre* professes to be an autobiography, and we think it likely that in some essential respects it is so. If the authoress has not been, like her heroine,

an oppressed orphan, a starved and bullied charity-school girl, and a despised and slighted governess, (and the intensity of feeling which she shows in speaking of the wrongs of this last class seems to prove that they have been her own,) at all events we fear she is one to whom the world has not been kind. And, assuredly, never was unkindness more cordially repaid. Never was there a better hater. Every page burns with moral Jacobinism. "Unjust, unjust," is the burden of every reflection upon the things and powers that be. All virtue is but well masked vice, all religious profession and conduct is but the whitening of the sepulchre, all self-denial is but deeper selfishness. In the preface to the second edition, this temper rises to the transcendental pitch. There our authoress is Micaiah, and her generation Ahab; and the Ramoth Gilead, which is to be the reward of disregarding her denunciations, is looked forward to with at least as much of unction as of sorrow: although we think that even the doomed King of Israel might have stood excused for his blindness, if the prophet had opened his message of wrath with a self-laudatory preface and eight closely-printed pages of panegyrical quotations, culled with omnivorous vanity from every kind of newspaper.

We select the following extract as an illustration of our remarks—a specimen at once of extraordinary powers of analyzing character and moral painting, and of a certain want of feeling in their exercise which defeats the moral object, and causes a reaction in the mind of the reader like that of a barbarous execution in the mind of the beholder. To render the passage intelligible, it is only necessary to premise that *Jane Eyre*, the heroine of the tale, is an orphan committed to the care of Mrs. Reed, her aunt, who after maltreating the child till she breaks out into a wild rebellion, sends her to a charity school to live or die as she may. *Jane Eyre* lives. Aunt Reed is dying, and *Jane Eyre* is at her bedside.

"I am very ill, I know," she said ere long. "I was trying to turn myself a few minutes since and find I cannot move a limb. It is as well I should ease my mind before I die: what we think little of in health, burdens us at such an hour as the present is to me. Is the nurse here? or is there no one in the room but you?"

I assured her we were alone.

"Well, I have twice done you a wrong which I regret now. One was in breaking the promise which I gave my husband to bring you up as my own child; the other—" she stopped. "After all, it is of no great importance perhaps," she murmured to herself: "and then, I may get better; and to humble myself to her is painful."

She made an effort to alter her position, but failed: her face changed; she seemed to experience

some inward sensation—the precursor perhaps of the last pang.

"Well: I must give it over. Eternity is before me: I had better tell her. Go to my dressing-case, open it, and take out a letter you will see there."

I obeyed her directions. "Read the letter," she said.

It was short and thus conceived:—

"Madam,

"Will you have the goodness to send me the address of my niece, Jane Eyre, and to tell me how she is! It is my intention to write shortly, and desire her to come to me at Madeira. Providence has blessed my endeavors to secure a competency; and as I am unmarried and childless, I wish to adopt her during my life, and bequeath her at my death whatever I may have to leave.

"I am, Madam, &c. &c.

"JOHN EYRE, Madeira."

It was dated three years back.

"Why did I never hear of this?" I asked.

"Because I disliked you too fixedly and thoroughly ever to lend a hand in lifting you to prosperity. I could not forget your conduct to me, Jane—the fury with which you once turned on me; the tone in which you declared you abhorred me the worst of anybody in the world; the unchildlike look and voice with which you affirmed that the very thought of me made you sick, and asserted that I had treated you with miserable cruelty. I could not forget my own sensations when you thus started up and poured out the venom of your mind: I felt fear as if an animal that I struck or pushed had looked up at me with human eyes and cursed me with a man's voice. Bring me some water! Oh, make haste!"

"Dear Mrs. Reed," said I, as I offered her the draught she required, "think no more of all this, let it pass away from your mind. Forgive me for my passionate language: I was a child then; eight, nine years have passed since that day."

She heeded nothing of what I had said; but when she had tasted the water and drawn breath, she went on thus:—

"I tell you I could not forget it; and I took my revenge: for you to be adopted by your uncle, and placed in a state of ease and comfort, was what I could not endure. I wrote to him; I said I was sorry for his disappointment, but Jane Eyre was dead: she had died of typhus fever at Lowood. Now act as you please: write and contradict my assertion—expose my falsehood as soon as you like. You were born, I think, to be my torment; my last hour is racked by the recollection of a deed, *which but for you, I should never have been tempted to commit.*"

"If you could but be persuaded to think no more of it, aunt, and to regard me with kindness and forgiveness —"

"You have a very bad disposition," said she, "and one to this day I feel it impossible to understand: how for nine years you could be patient and quiescent under any treatment, and in the tenth break out all fire and violence, I can never comprehend."

"My disposition is not so bad as you think; I am passionate, but not vindictive. Many a time, as a little child, I should have been glad to love you, if you would have let me; and I long earnestly to be reconciled to you now: kiss me, aunt."

I approached my cheek to her lips: she would not touch it. She said I oppressed her by leaning

over the bed; and again demanded water. As I laid her down—for I raised her and supported her on my arm while she drank—I covered her ice-cold and clammy hand with mine: the feeble fingers shrank from my touch—the glazing eyes shunned my gaze.

"Love me, then, or hate me, as you will," I said at last, "you have my full and free forgiveness: ask now for God's; and be at peace."

Poor, suffering woman! it was too late for her to make now the effort to change her habitual frame of mind; living, she had ever hated me—dying, she must hate me still.

I yet lingered half an hour longer, hoping to see some sign of amity: *but she gave none.* She was fast relapsing into stupor; nor did her mind again rally: at twelve o'clock that night she died. I was not present to close her eyes, nor were either of her daughters. They came to tell us the next morning that all was over. She was by that time laid out. Eliza and I went to look at her: Georgiana, who had burst out into loud weeping, said she dared not go. There was stretched Sarah Reed's once robust and active frame, rigid and still: her eye of flint was covered with its cold lid; her brow and strong traits wore yet the impress of her inexorable soul. A strange and solemn object was that corpse to me. I gazed on it with gloom and pain: nothing soft, nothing sweet, nothing pitying, or hopeful, or subduing, did it inspire; only a grating anguish for her woes—not my loss—and a sombre, tearless dismay at the fearfulness of death in such a form.

Eliza surveyed her parent calmly. After a silence of some minutes she observed:—"With her constitution she should have lived to a good old age: her life was shortened by trouble." And then a spasm constricted her mouth for an instant: as it passed away she turned and left the room, and so did I. Neither of us had dropped a tear.—Vol. ii., p. 177—182.

Here we have a deathbed of unrepentant sin described with as deliberate a minuteness and as serene a tranquillity as a naturalist might display in recording the mortal orgasms of a jelly-fish. It is the despair of Beaufort—the "He dies and makes no sign," without the response, "O God, forgive him!" All the expressions of tenderness and forgiveness, on the part of the injured Jane, are skilfully thrown in so as to set off to the utmost the unconquerable hardness of the dying sinner's heart. They are the pleadings of the good angel, made audible, and rejected to the last. We are compelled to see and acknowledge, beyond the possibility of doubt, that Mrs. Reed dies without remorse, without excuse, and without hope.

The plot is most extravagantly improbable, verging all along upon the supernatural, and at last running fairly into it. All the power is shown and all the interest lies in the characters. We have before intimated our belief, that in Jane Eyre, the heroine of the piece, we have, in some measure, a portrait of the writer. If not, it is a most skilful imitation of autobiography. The character embodied in it is precisely the same as that which prevades the whole book, and breaks out most signally in the preface—a temper naturally harsh, made harsher by ill usage, and visiting both its defect and its wrongs upon the world—an

understanding disturbed and perverted by cynicism, but still strong and penetrating—fierce love and fiercer hate—all this viewed from within and colored by self-love. We only wish we could carry our hypothesis a step further, and suppose that the triumph which the loving and lovable element finally obtains over the unloving and unlovable in the fictitious character had also its parallel in the true. But we fear that few readers will rise from the book with that impression.

The character of Mr. Rochester, the hero, the lover, and eventually the husband, of Jane Eyre, we have already noticed as being, to our minds, the characteristic production of a female pen. Not an Adonis, but a Hercules in mind and body, with a frame of adamant, a brow of thunder, and a lightning eye, a look and voice of command, all-knowing and all-discerning, fierce in love and hatred, rough in manner, rude in courtship, with a shade of Byronic gloom and appetizing mystery—add to this that when loved he is past middle age, and when wedded he is blind and fire-scarred, and you have such an Acis as no male writer would have given his Galatea, and yet what commends itself as a true embodiment of the visions of a female imagination. The subordinate characters almost all show proportionate power. Mr. Brocklehurst, the patron and bashaw of Lowood, a female orphan school, in which he practises self-denial, *alieno ventre*, and exercises a vicarious humility, is a sort of compound of Squeers and Pecksniff, but more probable than either, and drawn with as strong a hand. His first interview with Jane Eyre, in which he appears to the eye of the child “like a black pillar,” and a scene at Lowood in which, from the midst of a galaxy of smartly dressed daughters, he lectures the half-starved and half-clothed orphans on his favorite virtues, would be well worth quoting, but that their humor borders on the profane. His love of miracles of destruction is a true hit. *Those* miracles are still credible. So is the inscription on the wall of Lowood. “Lowood Institution. This portion was rebuilt A.D. —, by Naomi Brocklehurst, of Brocklehurst Hall, in this county.” “Let your light so shine before men, that they may see your good works, and glorify your Father which is in heaven.” Mrs. Reed is a good type of the “strong-minded” and odious woman. Excellent, too, in an artistic point of view, is the character of St. John Rivers, the Calvinist clergyman and missionary, with all its complex attributes and iridescent hues—self-denial strangely shot with selfishness—earthly pride and restless ambition blending and alternating with heaven-directed zeal, and resignation to the duties of a heavenly mission. The feeblest character in the book is that of Helen Burns, who is meant to be a perfect Christian, and is a simple seraph, conscious moreover of her own perfection. She dies early in the first volume, and our authoress might say of her saint, as Shakspeare said of his Mercutio, “If I had not killed her, she would have killed me.” In her, however, the Christianity of Jane Eyre is concentrated, and with

her it expires, leaving the moral world in a kind of Scandinavian gloom, which is hardly broken by the faint glimmerings of a “doctrine of the equality of souls,” and some questionable streaks of that “world-redeeming creed of Christ,” which being emancipated from “narrow human doctrines, that only tend to elate and magnify a few,” is seldom invoked but for the purpose of showing that all Christian profession is bigotry and all Christian practice is hypocrisy.

In imaginative painting Jane Eyre is very good. Take the following—probably from the threshold of the lake country—the neighborhood of Kirby Lonsdale.

I discovered, too, that a great pleasure, an enjoyment which the horizon only bounded, lay all outside the high and spike-guarded walls of our garden: this pleasure consisted in a prospect of noble summits girdling a great hill hollow, rich in verdure and shadow; in a bright beck, full of dark stones and sparkling eddies. How different had this scene looked when I viewed it laid out beneath the iron sky of winter, stiffened in frost, shrouded with snow! When mists as chill as death wandered to the impulse of east winds along those purple peaks, and rolled down “ing” and holm till they blended with the frozen fog of the beck! That beck itself was then a torrent, turbid and curbless: it tore asunder the wood, and sent a raving sound through the air, often thickened with wild rain or whirling sleet; and for the forest on its banks, that showed only ranks of skeletons.

April advanced to May: a bright, serene May it was; days of blue sky, placid sunshine, and soft western or southern gales filled up its duration. And now vegetation matured with vigor: Lowood shook its tresses: it became all green, all flowery, its great elm, ash and oak skeletons were restored to majestic life; woodland plants sprang up profusely in its recesses; unnumbered varieties of moss filled its hollows, and it made a strange, grand sunshine out of the wealth of its wild primrose plants.—Vol. i., pp. 145, 146.

The rather ambitious descriptions of manners and social life which the book contains are, we are bound to say, a most decided failure. Their satire falls back with accumulated force upon the head of the satirist. It is “high life below stairs” with a vengeance; the fashionable world seen through the area railings, and drawn with the black end of the kitchen poker. Listen to the polite badinage of Mr. Rochester’s drawing-room.

“Certainly, my best,” says Lady Ingram to her daughter, “and I was quite right; depend on that: there are a thousand reasons why *liaisons* between governesses and tutors should never be tolerated a moment in any well-regulated house; *firstly*—”

“Oh gracious, mamma! Spare us the enumeration! *Au reste*, we all know them: danger of bad example to innocence of childhood; distractions and consequent neglect of duty on the part of the attached; mutual alliance and reliance; confidence thence resulting—insolence accompanying—mutiny and *general blow up*. Am I right, Baroness Ingram, of Ingram Park?”

“My lily-flower, you are right now, as always.”

Or the following playful coquetry between the said lily-flower and Mr. Rochester:—

"Mr. Rochester, do you second my motion?"

"Madam, I support you on this point as on every other."

"Then on me be the onus of bringing it forward. Signior Eduardo, are you in voice to-night?"

"Donna Bianca, if you command it, I will be."

"Then signior, I lay on you my sovereign behest to furbish up your lungs and other vocal organs, as they will be wanted on my royal service."

"Who would not be the Rizzio of so divine a Mary?"

"A fig for Rizzio!" cried she, tossing her head with all its curls, as she moved to the piano. "It is my opinion the fiddler David must have been an insipid sort of a fellow: I like Black Bothwell better: *to my mind a man is nothing without a spice of the devil in him*; and history may say what it will of James Hepburn, but I have a notion, he was just the sort of wild, fierce, bandit-hero, whom I could have consented to gift with my hand."

"Gentlemen, you hear! Now which of you most resembles Bothwell?" cried Mr. Rochester.

"Here then is a corsair song. Know that I doat on corsairs; and for that reason, sing it *con spirito*."

"Commands from Miss Ingram's lips would put spirit into a mug of milk and water."

"Take care, then: if you don't please me, I will shame you by showing how such things *should* be done."

"That is offering a premium on incapacity: I shall now endeavor to fail."

"*Gardez-vous en bien!* If you err wilfully, I shall devise a proportionate punishment."

"Miss Ingram ought to be element, for she has it in her power to inflict a chastisement beyond mortal endurance."

"Ha! Explain!" commanded the lady.

"Pardon me, madam: no need of explanation; your own fine sense must inform you that one of your frowns would be a sufficient substitute for capital punishment."—Vol. ii., pp. 52—57.

The novelist is now completely lord of the domain of fiction. Whatever good or evil is to be done in the present day through that medium, must be done by him. He is the only dramatist whose plays can now command an audience. He is the only troubadour who finds admittance into the carpeted and cushioned halls of our modern chivalry, and arrests the ear of the lords and ladies of the nineteenth century. His work is the mirror of our life. It is the *Odyssey* and the *Nibelungen Lied* under a strange form; but still it is them indeed. Man's appetites do not change, nor his faculties, but only the external conditions under which they act; and the same appetites, the same faculties, which under one set of external conditions gave birth to Achilles, under another set give birth to Waverley or Pelham; who is to the reading gentleman what the son of Thetis was to the listening Greek—himself made perfect.

In the infancy of nations—in the age of bodily prowess, war, adventure, chivalry, when the mind is always turned outwards to great deeds, and never inwards to itself, the Romance, be it in the prose form specifically so called, or in the ballad, or that higher form of ballad which is termed the Epic, holds undivided sway. The *Iliad* and *Odyssey*

ought to be classed, not with the *Æneid*, *Paradise Lost* and the *Henriade*, but with *Amadis de Gaul* and the *Cid*. Virgil, Milton, and Voltaire have obscured the idea of the Epic, as the perfection of ballad poetry, by trying to write after the Epic model in an unepic age. The consequence of this error to themselves (a consequence which Virgil and Milton seem to have felt) is, that Virgil is redeemed from failure by certain non-epic passages, such as the history of Dido's love, and the splendid *Inferno* and *Paradiso* in the Sixth Book; Voltaire fails utterly; and Milton, thanks to that immortal force of genius which his original fault of judgment could not force from its true bent, produces a great spiritual poem—the poem of Puritanism.

To another age of civilization belongs the drama. This too has its time—a time which does not return. Homer's heroes hurl stones ten times as large as his audience could hurl; but his audience too hurled stones, or they would not have heard of it with interest. In Shakespeare's plays action may be ten times more intense and rapid, language ten times more vehement, and character ten times more marked, than in the real men of his day; but still in the real men of his day action was intense and rapid, language was vehement, and character was marked. The Sidneys, Raleighs, and Southamptons saw in the heroes of the stage what they themselves aimed at being, and, in some measure, were. It was their own age which they saw imaged there, with all its grandeur, and its grotesqueness, its free and swelling speech, its fierce and open passion, its strong and sudden hand. The wildest Utopia which the brain of an idealist ever conceived, was only an exaggeration of the type of his own age. Plato's Republic is but a Greek polity after all. And so, we may be sure, the eye of the great poet, when rolling in its finest frenzy, saw the men of his own day, though he saw them through and through, to the very core of their humanity, and therefore was the poet of all ages while he was the dramatist of one. The essence of the drama is the development of character through action. When character is no longer developed in action—that is in visible action—the drama ceases. And that is the case in the period of civilization at which we are now arrived. You can no longer tell what a man is by what you see him do. The essence of action is driven inward; and what little does remain outward and visible, so as to be available for the purposes of the drama, is spread over so wide an expanse of mere conventionality and commonplace, that it cannot be eliminated and presented with dramatic rapidity without outraging all sense of probability. The perpetual tendency of civilization is to rub down all that is salient and prominent—all that of which the dramatist takes hold. The life of an individual of the higher classes in the present day is a perpetual *figuratia*—a polite dissimulation. Good breeding prevents the transpiration of character in manner; and language is seldom used to reveal the heart, though scoundrels only use it to conceal

their thoughts. You might as well produce your hero on the stage in a state of physical nudity, as in the state of moral nudity which the drama requires. The spectre of Clio does indeed still walk the earth. We have tragedies of two kinds—the intolerable, which are meant to be acted, and the tolerable, which are not meant to be acted, but only read; that is, undramatic dramas—poems on moral subjects thrown into the form of dialogue and divided into acts and scenes. Three of this latter kind stand distinguished by acknowledged merit—"Edwin the Fair," "Philip van Artevelde," and Mr. Kingsley's "Saint's Tragedy." In all these the scene is laid really—not formally only, as in the case of many of the plays of Shakespeare—in a far distant age: and in all, the thing principally aimed at and effected is not so much the development of character by action, as the embodiment of one predominant idea—an idea suggested in the case of "The Saint's Tragedy," and perhaps in that of "Edwin the Fair" also, by the theological controversies of our day, and which the poet takes occasion to express as it were from a vantage ground and with an appearance of impartiality, by putting it into the lips of other men, and throwing it back into other times. "Philip van Artevelde" is but an expansion of the simple moral of Wordsworth's *Dion*:

Him only pleasure leads and peace attends,
Him, only him, the shield of Jove defends,
Whose means are fair and spotless as his ends.

And each of these three productions has something in it essentially artificial and unreal. They are beautiful dramatic exercises—no more the genuine and spontaneous growth of the present age than any copy of Greek or Latin verses.

Comedy shows more life. But it is not the comedy of Shakespeare—the counterpart of tragedy—the embodiment of the humorous and grotesque. That appears no more in its proper shape, except when its spectre is raised by Mr. Taylor and Mr. Kingsley. The comedy which does keep possession of the stage, is the comedy of manners, of the witty and the ridiculous. No other is any longer credible. A Falstaff or a Malvolio has become an impossible monster. The tailor and the schoolmaster, and the restraints and influences of polite society, have made your fool, in all external things, very difficult to distinguish from your hero.

Still the spirit lives, though the form has passed away. The ground once covered by the epic and the drama is now occupied by the multiform and multitudinous novel in all its various phases, from "Ellen Middleton" to "Pickwick." That is to say, the novel has absorbed the strictly dramatic and epic element; for the lyric element which the drama and epic held, as it were, in solution, is concentrated and crystallized under another form. We use the word "lyric" for want of a better, to include all poetry not narrative, descriptive, dramatic, or didactic—all the poetry of abstract feeling, sentiment, passion; without any reference to be "lyres" and "wires" with which such poetry,

or a large division of it, was once associated, and of which it still, unfortunately, babbles. Byron presents disembodied and in its essence the life which Bulwer has embodied in Pelham and Ernest Maltravers; and the antagonists of Byron in poetry stand in a similar relation to the antagonists of Bulwer in prose. All those difficulties which oppose themselves with insuperable force to any attempt to epicize or dramatize the life of one day, the novelist, by means of his peculiar privileges and immunities, completely overcomes. Those long threads of commonplace doing and suffering which now make up the web of the most varied and eventful existence—which it is impossible to ignore, because, taken together, they are everything—impossible to narrate, because in their particulars they are mean—impossible to exhibit on the stage, because their length and complexity is infinite—are summed up and reduced to unity and significance. Between the rapidity and intensity of real and fictitious action a proportion is preserved, and the sense of probability is not outraged. The essence of action is followed into the recesses of the heart, without the fatal necessity of perpetual soliloquies and "asides." The gesture which would be indescribable in the epic, and invisible or unmeaning on the stage, is to the reader described, made visible, and rendered significant, by the exercise of an unlimited power of interpretation. The want of outward symbols and drapery is completely supplied by moral description; the integuments of social form and etiquette are stripped off, and we see that the tragic and the comic, the heroic and the base, the Hamlet and the Polonius, the Achilles and the Thersites, have not departed from life, but are only hidden from the eye—that it is true, as Carlyle says, that there is the fifth act of a tragedy in every peasant's death-bed, if you can only get it on the stage. The curtain of the novelist rises. The scene is a drawing room, where all the company are dressed alike; all have been drilled into a sort of Prussian discipline of manners, and a marked trait of character scarcely escapes once an hour. The worst dressed man there is perhaps the man of rank, the best dressed is the nobody. We penetrate at once through all the outworks of Stultz and Chesterfield into the depths of every breast—we know the royal nature from the slavish, the hero from the knave. The grouping of the guests, their conversation, their attention or inattention, their every look and gesture, has its true significance—a significance which no Garrick could impart. We discern the secret of the heart which causes a slight embarrassment of manner, a slight absence and wandering in discourse in the most polite and self-possessed of diners-out. We mark the plot or the intrigue which lurks in the arrangement of the party round the dinner table. We hear the bitter or passionate things which are said in soft words and with calm faces. The noise of the piano hides nothing from us. We know that the faint sigh which good breeding hushes on the lip would be, but for good breeding, an Othello's

groan. We see that the empty coffee cup is raised to the lip to conceal a smile of triumph, or the face buried in a book of prints to hide the pallor of despair. In this respect, indeed, the novel has the advantage of the drama, not only with reference to the necessities imposed by its particular subject matter, but in the abstract. When Johnson objects to Iago's long soliloquy, that he is telling himself what he knows already, he is guilty of almost as great a platitude as in saying, that "had the scene of Othello opened in Cyprus, and the preceding incidents been occasionally related, *there had been little wanting to a drama of the most exact and scrupulous regularity.*" Iago is not telling himself anything; he is telling his audience what is passing through his mind. It is necessary to do so in order to give them a clue to his designs; but it is an awkward necessity, and one with which the genius of Shakspeare alone has dealt successfully.

Our object in this somewhat rambling digression has been to show what responsibility rests upon the novelists of our day—a reflection which we beg to suggest to the authoress of *Jane Eyre*. With them it rests to determine, each for himself and according to the measure of his gifts, whether so powerful an instrument of moving men, as fiction is, shall be used to move them for good or evil. Are the poetic and artistic faculties given to man purely for his amusement? Are they alone of all his powers not subject in their exercise to the legislative or judicial conscience. Curiously enough, we believe no moral philosopher has yet given a complete scientific answer to this question. A philosophical account of that part of man's essence which is neither moral nor intellectual, but lies midway between the two, both in itself and in its relation to the moral and intellectual parts, would we believe still be an addition to moral science. Neither in the fragments which remain to us of the poetics, nor in the psychology of the sixth book of the ethics, can Aristotle be said to have approached this subject. Plato in his Republic makes the same mistake regarding poetry which he makes with regard to rhetoric in the Gorgias—the same with the Patristic writer who calls poetry "*vinum dæmonum*"—that of confounding the faculty with its abuse—and the beautiful *amende* of the Ion, though it vindicates his instincts, does not mend his system. However this may be, the position that the poetic and artistic faculties are subject to conscience, is a truism in theory which seems to be metamorphosed into a paradox in practice. We suppose, for example, that Mrs. Marcet considered herself to be uttering an acknowledged truth in saying that Goldsmith's "*Deserted Village*," being poetry, is none the worse for being bad political economy. Yet if this is so, neither is Don Juan, being also poetry, the worse for being bad religion. Goldsmith intended, or at least he foresaw, that the effect of his poem would be, to raise certain sentiments and impressions relative to certain social questions; and if those sentiments were morbid

and those impressions wrong, his poem is as plainly vicious as the most rigorous scientific treatise, embodying the same fallacies, would have been. This may seem an exaggerated instance. It is an *experimentum crucis*, certainly—but where is the line of demarcation to be drawn? The rule of truth-telling is, to convey a right impression; and therefore, unless a poet is to be absolved from the rule of truth-telling, his sentiments, as distinguished from his facts, must all be true. Deny this, and the realms of poetry and fiction become, what poor Charles Lamb pretended to think they were, a sort of refuge from the sense of moral responsibility—a region where the speaker of lies or blasphemies does no harm, and the hearer takes none—a place where the Omnipresent is not, beyond "the uttermost parts of the sea," to which the spirit of the Psalmist, borne on the wings of morning, fled in vain—a darkness which shall *not* be turned into day. We do not mean to say that the writer of fiction is called upon to play the part of the preacher or the theologian. Far from it. What he is called upon to do is to hold up a clear and faithful mirror to human nature—a mirror in which it shall see its good as good, its evil as evil. His pages must give back the true reflection of a world of which morality is the law, and into which Christianity has entered.

The tendency of English novelists seems happily to be at present in the right direction. Within the last fifteen years, common sense, at any rate, has achieved some victories in our literature. Shakspeare has shone forth again, and Byron labors in eclipse. No heads, we believe, but those of shopboys and farmers' daughters, are now in danger of being turned by Lytton Bulwer. That Upas tree is pretty well withered up by contempt and ridicule in this country, though it still flourishes with rank luxuriance in the congenial soil of France. Dumas, Sue, and George Sand are, indeed, read by us, as well as by their own countrymen; but then we read them for the story, and laugh at the sentiment, which a Frenchman swallows as the word of life. The belief that the pen of a west-end Adonis could regenerate society, without the tedious process of repentance and self-government, is passing away with the last great men of that heroic age which produced the national gallery and the reform bill. The religion which teaches that to sin is the indifferent-best way to save your soul, and that to prostitution in the higher classes much will be forgiven, has day by day fewer symbolical writings and fewer prophets in the land. Whether another and a more fatal humbug may not succeed, and whether a certain phase of the religious novel may not prove that humbug, remains yet to be seen. But at present a better influence reigns in the whole world of fiction, poetry, and art; and everywhere men who work by the rules of sense and truth, the Christian architect and the Christian writer, are slowly gaining ground, and seem likely—unless their course is crossed by some convulsion of society such as the last month has taught us to consider possible—

to make rubble of the chimney-potted Parthenon and waste paper of the Satanic novel.

What would be the fate of the authoress whose work we are now reviewing, should that happy consummation be brought to pass, must be considered as doubtful. To say that "Jane Eyre" is positively immoral or antichristian, would be to do its writer an injustice. Still it wears a questionable aspect. The choice is still to be made, and he who should determine it aright would do literature and society some service. The authoress of "Jane Eyre" will have power in her generation, whether she choose to exercise it for good or evil. She has depth and breadth of thought—she has something of that peculiar gift of genius, the faculty of discerning the wonderful in and through the commonplace—she has a painter's eye and hand—she has great satiric power, and, in spite of some exaggerated and morbid cynicism, a good fund of common sense. To this common sense we would appeal. Let her take care that while she detects and exposes humbug in other minds, she does not suffer it to gain dominion in her own. Let her take warning, if she will, from Mr. Thackeray, to whom she dedicates her second edition, whom she thinks "the first social regenerator of the day," and whose "Greek-fire sarcasm" and "levin-brand denunciation" she overwhelms with such extravagant panegyric. Let her mark how, while looking everywhere for "Snobs" to denounce, he has himself fallen into one, and not the least vicious, phase of that very character which he denounces. Or let her seek a more signal and ominous example in the history of that far higher mind which, after demolishing innumerable "shams," has itself, for want of a real faith of its own, sunk into the mournfullest sham of all. Let her reconsider her preface, and see how conventional may be the denouncer of conventionality, how great an idol the iconoclast may leave unbroken in himself. Let her cease, if she can, to think of herself as Micaiah, and of society as Ahab. Let her be a little more trustful of the reality of human goodness, and a little less anxious to detect its alloy of evil. She will lose nothing in piquancy, and gain something in healthiness and truth. We shall look with some anxiety for that second effort which is proverbially decisive of a writer's talent, and which, in this case, will probably be decisive of the moral question also.

From the Times.

AUSTRIA.

THE position of the Austrian empire, with reference to the two great political bodies of Germany and Italy, not to mention the difficulties which belong to the reform of its own institutions, is more critical than that of any other state in Europe; for, although we are unable to foresee the transformations which other countries may be destined to undergo, no one can doubt of their vitality, whereas, the external ascendancy which Austria has enjoyed amongst the German and Italian states appears to

be threatened with entire dissolution. The traditions of her imperial dignity and power have become more faint from year to year, and it is evident henceforth that the real influence which Austria may continue to exercise in Europe depends entirely on her own internal resources. She has virtually ceased to be the parent of Germany and the arbitress of the Italian governments. This loss of power has been aggravated in the present emergency by the absence of princes and ministers competent to wield her sceptre, or to direct her councils. Yet, in spite of all these adverse circumstances, the position of Austria on both sides of the Alps is still so strong, and the connection of the imperial house with the mass of the people is, upon the whole, so unbroken, that we entertain little doubt but that the vast and cumbrous vessel of the empire will ride out this tempest.

It is evident, on the simple inspection of the scheme for the reconstitution of the German empire which has been concocted at Frankfort, and which we discussed at some length yesterday, that Austria is no party to such a project. Accordingly we read an announcement in the Vienna Gazette to the effect, that the imperial government does not hold itself bound to submit implicitly to all the decisions of the constitutive assembly about to meet at Frankfort in the name of the German people; and this declaration indicates plainly enough that the court of Vienna never intends to give in its federal allegiance to a power whose greatness should be raised on the destruction of its own authority, not only over Germany, but in its own dominions. If, indeed, it should appear fit to this national assembly to restore the dignity of the empire to that family which was invested with it for ages, until French influence had broken up the last vestiges of its authority, such an arrangement might be no more than a restoration of old rights under new forms. But if it be proposed to transfer the imperial powers of the head of this new confederation into another house, and to secure it there by an hereditary tenure, it is certain that, whatever other parts of Germany and other candidates for that supreme dignity may think of such a suggestion, Austria will not spontaneously abdicate her rank and her independence. Nor, indeed, is it likely that the population of those provinces of the Austrian empire which belong to the present confederation would urge the government to make so unparalleled a sacrifice. The kingdom of Bohemia, the largest of these provinces, with more than four millions of inhabitants, is far more eager to restore the language and traditions of its distinct Slavonian origin than to join the general Teutonic movement; and upon the very principles which the Germans are now eager to apply to their northern neighbors they must renounce Bohemia as a non-German province. The other hereditary dominions of Austria, the archduchies, the Tyrol, the Salzkammargut and the Vorarlberg, are purely German, but their inhabitants have ever been the most loyal and devoted subjects to the house of Hapsburg. They too will be little disposed to transfer their allegiance to a new empire, and to be brought into immediate contact with

the heretical creed and the foreign manners of their northern allies. The effect of this whole scheme would be the subjection of the German power of the house of Austria to a modern sovereignty supported by a Protestant democracy; and, if such an attempt be seriously made, we fear it will lead ere long to an armed resistance. The promised constitution of the Austrian empire has been promulgated. It is conceived in a wise and liberal spirit, without the excessive concessions made in some other states. For the first time a national and legislative tie is about to unite the Austrian provinces between themselves; and yet this moment is chosen by the German leaders to call upon them to sacrifice their own independence to the will of a larger country, and to sink their newly acquired liberties in the bosom of another empire. Such an offer will be alike rejected by the Austrian princes and the Austrian people.

In Italy the power of Austria is already, as all the world knows, still more openly assailed, but we have hitherto seen no reason to modify the opinion we originally expressed on the military prospects of this contest, as long as it is confined to the present belligerent parties. The evacuation of Lombardy was the first incident in the war, and it was to a great extent a voluntary and prudent retreat on the part of Marshal Radetzky. By securing his position between the great fortresses of the Mincio and the Adige he avoided any unnecessary effusion of blood, he recruited and collected his troops, he waits in security for the arrival of reinforcements, he allows the first impetus of the insurrection to cool, and shows the Sardinian army that the emancipation of Italy is not to be accomplished by a few hasty marches. Moreover, this position of the Austrians has interrupted the direct communication between Milan and Venice, and the Venetian territory has derived no sort of benefit from the Piedmontese demonstration on the western frontier. Higher up the country the corps which is advancing under Count Nugent has crushed the insurgents wherever it has appeared. Udine has surrendered; Pordenone has been occupied; and we shall not be surprised to learn that Venice itself has capitulated. That city has long been comparatively well disposed to Austria, and the recent attack on the British consulate shows that the government cannot control the mob without a garrison.

It may be blockaded by sea and land, and the provisional authorities have given offence to their Italian neighbors by a want of concert in the common enterprise. This state of things suggests a conclusion which ought to be acted upon for the benefit of all parties. The Austrian empire may, without any material diminution of dignity or real power, sacrifice the Milanese and even the Mantuan territories. There is nothing which can be called a defensible frontier short of the Mincio. Indeed, so strongly was the late Emperor Francis impressed with the difficulties and perils inseparable from a foreign administration of Lombardy, that it was with great reluctance he was induced in 1815 to allow it to be annexed to his empire. His sagacious prognostications have been fulfilled, and the experiment of an Austrian viceroy in Milan has failed. But the case is wholly different with the Venetian territory. From the moment that the republic of Venice ceased to be able to repel invasion or to preserve its neutrality, it laid bare the frontier of the Austrian dominions in their most vital part. The campaign of 1798 demonstrated that a French army, when it has forced

the Adige and passed the lake of Garda, is on the high road to Vienna. The maintenance of that great line of defences by Austria is absolutely essential, not to her supremacy in Italy—for that we assume her to have abandoned or forfeited—but to the security of the imperial capital. We are, therefore, morally certain, that though the cabinet of Vienna might be induced to treat, and we think ought to treat, with reference to Lombardy, it will not hear of the sacrifice of the Venetian territory, until it has undergone the last humiliations of defeat by an enemy of vastly superior military power. The Lombard government, if it be wise, ought at once to close with such terms, if they can be obtained. They are under no obligation of honor or policy to treat conjointly with Venice, for Venice instantly proclaimed her own exclusive republic; and, if they hold out for more than they have gotten, they run some risk of losing the whole, or they open the door of Italy to a French republican army. There is not a man in Lombardy, worthy of the name of an Italian patriot, who would not regard such an event as a catastrophe fatal to those sacred principles of national independence which have marked this contest, and from that moment the future destinies of Italy would cease to depend on herself, and would again be governed by the rival policy of force of Paris or of Vienna. The imminent danger of a French invasion is the greatest peril Italy has to dread. It would be the triumph of a foreign military despotism under the disguise of republican liberty; and before a year had elapsed Italy would be sacked by those whom none but her worst sons could summon for her defence. With Austria there is still a chance of peace, if the present opportunity be wisely employed; and if this insurrection could be terminated by mutual concessions, all the parties to such a treaty would have a common interest in resisting future aggressions and in preserving the peace of Southern Europe.

MUSCULAR EXERCISE.—Muscular exercise is a direct source of pleasure to every one not suffering from diseased action. Every one must have felt this. The effect of using the muscles of voluntary motion, when all the processes of the economy are being justly and healthily performed, is to impart a marked and grateful stimulus to the sentient nerves of the part, and a corresponding and grateful stimulus to the nervous system generally, sufficiently noticeable by the mind when studious of its analysis, and always ministering indirectly to the happiness of the individual, coloring and brightening the thoughts and feelings. So much is this believed to be the case by some, that it has been asserted—a man may use his limbs too much to leave him in the enjoyment of his fullest capability of pure and abstract thought, and to the extent of making him unduly imaginative. Although this may well be matter of doubt, the fact, and its wise and benevolent intention, remain unaffected; that man derives an immediate pleasurable sensation from using his voluntary muscles, which not only gives to labor a zest, and even to monotonous movements some degree of enjoyment, but produces a reaction on the mind itself, embellishing a life of virtuous toil with a degree of physical enjoyment, and mental energy, buoyancy, and hopeful lightheartedness, that can never be afforded in a like degree to the drones—the mere “*fruges consumere nati*”—of the human hive.—*Robertson on Diet and Regimen.*

CORRESPONDENCE.

Paris, 11th May, 1848.

My last date was the epoch of the installation of the national assembly. Scenic exhibition and dramatic effect are always necessary in this meridian, and on this occasion they were highly exciting and imposing without the least tragedy. For details, you must be content at present with the newspaper-articles which I send you for any use. My note-book contains various incidents which fell under personal gaze, and may be regularly narrated hereafter. After the body was marshalled in the hall, *the republic* was proclaimed *seventeen* distinct times, with nearly universal shouts. How the several parties that begin to concrete respectively, understand the phrase, remains to be positively ascertained. Lamennais' scheme of a constitution, (he is now called the *Siéyes* of democracy,) with but one legislative body and a president for three years, cannot answer. The supreme revolutionary organ, the *Commune de Paris*, *Moniteur* of the clubs, says, "There are two rival schemes—the citizen and aristocratic republic, and the pure democratic, social one: we are for the latter, and claim for the people the right of interfering at any moment in the management of affairs. The journals, the clubs, the popular meetings, must never intermit their supervision of the government. We must preserve the revolution." At a sitting, of the 5th, of a great club, the point was mooted, Shall we have a president of the republic? After discussion, it was decided in the negative. A convention, and no more, would alone be welcome. "Some dreamers," said an orator, "call our attention to the United States; but we know that any separate executive leads to tyranny. The American Union is a mere aggregation of petty states—existing individually in fact; we boast a common nationality. There is no analogy; let us have no foolish plagiarism: our model is the ideal which God has deposited in the mind and conscience of man." The Club of the Revolution, the mighty Colonel Barbès in the chair, adopted by acclamation the report of a committee on the question, *Shall we have a president, as in the United States?* which report ends thus: "No president in France." The organ called the *Liberty*, edited chiefly by Alexander Dumas, contends, on the other hand, for the American model. "The Americans," observes the novelist politician, "are the true republicans; they do not plume themselves on the epithet citizen, but they *work*; they dispute little about words; they clear their lands; they do not talk of exterminating any one, but they cover the seas with their ships; they construct immense canals, roads, and steamers, without jabbering, at every stroke of the spade, about the rights of man; with them, labor, merit and talents are honored and rewarded aristocracies; they welcome and benefit every comer; let us try to conjure up Washingtons, Jeffersons, Madisons and Monroes, instead of Robespierres, Dantons and Marats."

Upwards of eight hundred members of the assembly are present. It is wonderful that so many of the ex-chamber of deputies have gained seats—one hundred and twenty-nine, nearly all of the old opposition. Some thirty doctors are counted. The president and first vice-president chosen by the assembly were of the faculty: they are authors and respectable men. Lawyers and judges are reckoned at a hundred and eleven; literati and editors thirty-one; few farmers or workmen comparatively; the professions of nearly these hundred remain undiscovered. As no rules of internal discipline were adopted, and the members had only a partial acquaintance with each other, disorder has prevailed in such degree, that several of the moderate journals exclaim—"No constitution can be expected from such a concourse; tempests alone will be its progeny." However, a committee has been appointed to report a manual like that of Mr. Jefferson, and on the main questions hitherto submitted, the decision seems to have been sound. It is unfortunate that the clubs succeeded in getting a box for their delegates; these gentlemen, acting as inspectors and arbiters, mingle their stentorian voices with the clamors from the floor. You can form no idea of the throng of both sexes by whom the hall is besieged for entrance, or communication with the members.

The provisional rulers having at once resigned, we were without an executive administration for several days. On the 9th, however, the assembly voted the appointment of a Directory of Five, who were not to occupy any of the departments, but to choose ministers. Yesterday, the five were nominated in this order, Arago, Garnier-Pages, Marie, de Lamartine, Ledru-Rollin. The poet would have been the first, had he not refused to serve unless Rollin should be included—a man exceedingly disliked and feared by a large majority of the assembly. But Lamartine thought justly that the dangerous aspirant could be managed, or more closely watched, if a colleague. On the whole, what has been done is the best under the circumstances; the executive comprises capacity, experience and energy; it has no absolute tenure, however, and the list of its ministers, which is circulated, does not strike me as the happiest attainable: the heads of the departments of justice, commerce, and public instruction, remain the same as under the provisional government. This "Executive Commission" may have a long term—the interval necessary to frame a constitution and get its machinery in motion. I am not aware that the assembly mean to define or limit the powers of the commission. A dictatorship is alone possible. The eloquent member, Favre, whose reasonings won a majority for the plan, observed—"We need a *pouvoir*, an executive control, to act promptly and efficiently on the *inferior* classes." The *National* of this day pronounces the choice to be one of high political wisdom—*haute sagesse politique*. The *Exchange* was gratified, though the aspect of the finances be lurid. Some of the provincial spouters in the assembly surpass all your stump-

Ciceros. Yesterday, the last occupant of the tribune vociferated, gesticulated, and *jumped* with an extravagance such as convulsed the eight hundred on the floor, and the thousands in the galleries. The responsive roar and *saltation* compelled him to leap precipitately from his pulpit. Our Parisians hesitate whether to be merry or indignant at the *patois* of the rhetoricians from the distant departments. We have already been regaled with all the dialects of France, some of them nearly unintelligible, and most of them grotesque like the declaimers themselves.

The weather has been splendid since the beginning of the month. Scarcely any traces of the inundation remain. We read daily of popular excesses in the interior, but they are less serious than those of last week. Toulon is in distress with the whole mass of the workmen who have struck, not for wages especially, but civic privileges and military equipment. Most of the Marseilles laborers applied for passports to Paris, as the metropolis of the free, but the government had transmitted orders to all the southern cities to allow no more emigration, we being overstocked with this description of patriots. A committee has been appointed in the assembly to investigate the social problems. Louis Blanc proposed in the tribune a new department, a *ministry of progress*, with reference to those questions. The only aye on the vote was his own. *Socialism* is at an unexpected discount. In the *Revue des deux Mondes*, of the 1st instant, there is an excellent article on the vexed subject of labor, fraught with sound doctrine and impressive examples. That journal argues, and rightly, that the French public revenue can be improved only through the customs; by a thorough revision and modification of the tariff in the sense of free trade. Baron Charles Dupin has just issued a copious and orthodox report, on the situation of French Industry, addressed to the national assembly, and prepared by direction of the society for the encouragement of that concern. He pays high compliments to the industrial system and practice of the United States.

The reports of the different members of the provisional government to the national assembly, are strikingly characteristic. Lamartine struck his golden lyre, and brought forth sentimental melodies. "France and Europe comprehended that God inspired the multitude, and that a revolution inaugurated by greatness of soul would be as pure as an idea, magnanimous as a sentiment, holy as a virtue." (Well! exceeding well!—from all parts of the assembly.) The poet announced that

the treaties of 1815 were considered as defunct. In his second report he suggests that peace may be preserved, if the powers will consent to the independence of Poland and Italy. It is hoped that the German national assembly will settle this thorny question, so as to preclude the necessity of French intervention. The revolutionary Poles here and in the north attempt a sort of dictation over the French national assembly, and are seconded by the sovereign mob of Paris. All the nations seem to be arming with as much expedition as possible: France bristles with bayonets. The destinies of the continent become more uncertain from day to day. Louis Blanc, the apostle of the "organization of labor," in his report to the assembly, gave such touches of his quality as these: "The state should systematically interpose to protect the weak from the strong; the state should be tutelary for the ignorant, the poor, the sufferers of every description; we must have a guardian government; one that will accord the benefit of credit, not to the rich only, but the poor; it must interpose in the matter of industry, in order to exclude the principle of *antagonism*, (meaning competition,) that poisoned fountain of so much animosity, violence, and ruin. Our maxim is, human *solidarity*; all men are of the same family; and when they shall become thoroughly sensible of this kindred, discord, hate, selfishness will no longer be possible between them. France is the country of progress and reason, on the highest level, that of universal sacred humanity." Of the foreign advices of this morning, the revolution at Rome has created the liveliest sensation. The holy see is no longer an ecclesiastical government, nor Pius a free agent; but this *progress* was inevitable. As pope, he could not declare a war of aggression, particularly not on the chief Catholic power on the continent. At the same time, his subjects could not abstain from joining in the glorious effort of all the rest of the Italians to achieve the independence of their peninsula. Universal action is necessary. It would have been dastardly, base, and dangerous for the millions of the Papal dominions to remain longer aloof. Pius yielded, wisely; he may still be "the bond of Italy." That the whole peninsula will be *republican*, in no long period after the expulsion of the Austrians, is doubted by very few of the observers of Italian condition and drift. The war in the north, between the Danes and Prussians, is truly deplorable. We cannot be sanguine as to the British mediation, which has been accepted.

[After we shall have laid before our readers the following arguments and facts, which will probably change their opinions, no party can have any equitable claim upon us for another long article on the subject. We hope that the scientific world will give the honor of the great discovery to a gentleman whose studies and habits are such as to make his claims probable. Of Mr. Morton we have learned more than we shall say at present. This argument is prepared for us by Joseph L. Lord and Henry C. Lord, Esquires.]

THE ETHER CONTROVERSY.

THE writers of these pages are attorneys of Dr. Charles T. Jackson, of Boston. They have been employed by him to investigate the legality and equity of his claims to the recent discovery of the applicability of sulphuric ether, as an agent for safely producing insensibility to pain, during the performance of surgical operations.

It is well known that Dr. Jackson's claim to this discovery, has been drawn in question before the public, by Mr. W. T. G. Morton, a practical dentist of this city. Mr. Morton's counter-claim, and the justification of it by publications proceeding from various sources, to some of which the reader's attention will be requested, are before the public.

The authors perform their duty, without previous acquaintance with the persons whose names have appeared before the public, in this controversy, as parties, counsellors, witnesses, or apologists. They put the case upon its own merits, without bias from any personal, local, or accidental influence.

Since the publication, in June, 1847, of Dr. Martin Gay's able "Statement" of Dr. Jackson's claims to the discovery of etherization, the controversy has essentially changed its character. Mr. Edward Warren, who, it now appears, had a pecuniary interest in Mr. Morton's patent, had, previously to Dr. Gay's "Statement," issued various publications in Mr. Morton's behalf, of such a character as to be deemed by Dr. Jackson and his friends unworthy of an answer. The affidavits published by Mr. Warren, and recently bolstered up by publications from other and able sources, to prove that Mr. Morton had experimented with the ether, before Dr. Jackson communicated to him his first knowledge of its nature, and entrusted him with its first application, were, on their face, so suspicious, and connected with so suspicious circumstances, that it was hoped that the truth would be established by the evidence contained in Dr. Gay's pamphlet, without a sifting and exposure of the affidavits themselves. Accordingly, Dr. Gay, in conformity with his plan not to reflect upon the moral character of any individual, forbore to publish evidence, quite sufficient to justify the strongest suspicion of, if not to prove, the fraud and imposture, now placed, it is submitted, beyond the possibility of dispute.

In this state of the controversy, Nathaniel I. Bowditch, Esq., having been appointed, by the Trustees of the Massachusetts General Hospital, a member of a committee to draw up its annual Report for the year ending with 1847, undertook,—without formal instructions so to do, contrary to all precedent in the history of public charitable institutions, in opposition to the remonstrance of Dr. Gay, and of his declaration to Mr. Bowditch that there was important evidence with which he had not been

made acquainted, and which, as he himself admits, he declined to listen to, when Dr. Gay offered to communicate it to him confidentially,—undertook, we repeat, to constitute himself an arbiter in the controversy, and to publish to the world unjust accusations and conclusions against Dr. Jackson; invested with all the *prestige* and authority conferred upon them by his official position. Whatever he might properly do in his private capacity, he had no right to travel out of his way to wield the high influence of a great and noble institution, against a private individual, who had never committed any offence against it, but, on the contrary, had procured for it the most signal benefits.

Mr. Bowditch cannot, under these circumstances, complain, if his qualifications for the self-assumed arbitration, shall be, in his own words, somewhat "strictly scrutinized." We wish, however, first, to state distinctly that we do not hold the Trustees of the Hospital responsible for the truth of his statements, the legitimacy of his inferences, or the justness of his conclusions. Mr. Bowditch has admitted, in a communication published in the Boston Daily Advertiser, since the publication of his Report, that in one instance, to which we shall directly invite the reader's notice, they "relied upon his accuracy;" and from the well-known manner in which the proceedings of a board of trustees, so numerous as theirs, are conducted, we have no doubt that, when they adopted his Report, they relied upon him for the accuracy of the whole, no less than of any particular part. The only error we would impute to them, is that of placing undue confidence in Mr. Bowditch, and suffering him to meddle with the controversy at all. The high moral character of the gentlemen who compose the Board, forbids the suspicion of any intentional injustice towards Dr. Jackson. We cannot doubt that, should they be convinced they have been deceived, by an atrocious conspiracy to break down the character of an innocent man, and rob him of his rights of discovery, rights dearer to scientific men than money, or life itself, they will all, Mr. Bowditch not excepted, repair, as far as possible, the injustice and suffering which have, however unintentionally, been inflicted upon Dr. Jackson.

We now invite attention to a charge of fraud, made by Mr. Bowditch in his Report, and subsequently defended by him in the Daily Advertiser: "On the other hand, Dr. Jackson transmits to Europe, as a paper which he had read before the American Academy, a statement of his claims to this discovery; thus communicating it to the world under an official sanction to which it was not as yet entitled." The groundlessness and injustice of this imputation of fraud, will be seen from the following statement of facts. At the written suggestion of

Hon. Edward Everett, and Dr. J. C. Warren, Dr. Jackson addressed a paper to the American Academy, containing an account of his discovery of etherization. On March the 1st, 1847, the day before it was actually read to the Academy, it was, for the purpose of sending it to Europe by the next steamer, published in the Daily Advertiser, aforesaid, accompanied by some prefatory remarks by the editor, in which he stated, *not that it had been read before*, but that it was "addressed by Dr. Jackson to the American Academy of Arts and Sciences." The editor of the Advertiser,—in vindicating Dr. Jackson, to use his own words, "from the charge of fraudulent misrepresentation," and himself from "that of being a participator in the fraud,"—in an editorial article, published some weeks after the publication of Mr. Bowditch's Report, and introductory to a communication in which Mr. Bowditch was called upon to retract his charge, uses the following language: "It was not stated in the caption, or in the paper itself, [Dr. Jackson's,] that it had been read before the Academy; nor was there anything that implied that it had been so read. We think it obvious, therefore, that the authors of the Hospital Report must have fallen, through some inadvertence, into a material error in supposing that the paper had been 'communicated to the world,' under a sanction which did not belong to it."

Mr. Bowditch, in a reply to the aforesaid communication, in which he admits that he is responsible for the charge, (this being the instance before alluded to, in which Mr. Bowditch states that the trustees relied wholly upon his accuracy,) attempts to justify it, by arguing that what he had positively affirmed to be a fact, was a "legitimate inference." This "legitimate inference," as has been seen, is at total variance with the declaration of Hon. Nathan Hale. It is equally at variance with the general practice of scientific men, and of the American Academy itself, as will appear by the following letter of Mr. Everett, whose authority Mr. Bowditch will not call in question.

Cambridge, 15 May, 1848.

My Dear Sir,

I recollect having expressed the opinion decidedly, at one of the monthly meetings of the Academy, that no blame could attach to you for having printed and forwarded to Europe a paper, purporting to be addressed to the American Academy, before the paper had been read to the Academy. No sanction is understood to be given by the Academy to any doctrine or opinion contained in the memoirs submitted to it, nor when they have been read before it, printed at its expense, and bound up with its transactions.

I remain, Dear Sir, with great regard,
faithfully yours,

EDWARD EVERETT.

Dr. C. T. Jackson.

We have examined but one out of the many instances of false logic, misstatement of fact, and injustice to Dr. Jackson, with which Mr. Bowditch's Report abounds. The reader will not now doubt, that all of Mr. Bowditch's statements and inferences are to be received with great distrust.

and that Mr. Bowditch, in this controversy, has assumed the part of a heated advocate, and not of an impartial judge. In justice to Mr. Bowditch, however, it should be remembered that his position was unfavorable for forming an impartial judgment upon the matters in controversy. Two of the medical gentlemen connected with the Hospital, Dr. Jacob Bigelow, and his son Dr. Henry J. Bigelow, early committed themselves against Dr. Jackson's claims. The latter, during a short absence of Dr. Jackson from the city, early in November, 1846, read before the American Academy, and the Boston Society of Medical Improvement, of both which bodies Dr. Jackson is a member, a paper "promulgating" Dr. Jackson's discovery of etherization to the world; and a few days afterwards, further "promulgated" it, by publishing the same paper in the Boston Medical Journal, making no other allusion to Dr. Jackson, than that he and Mr. Morton were named in the patent as inventors. May not the "promulgator" of etherization naturally have felt some misgivings, lest the self-woven wreath with which he has sought to encircle his brow, might prove to be, not of laurel, but of night-shade; and may not these same misgivings account for the continued activity of his pen in filling the pages of the Journal, and for the entire suppression, by his father, of the name of Dr. Jackson, in his letter to Dr. Boot, of London, under date of Nov. 28, 1846, published, with his son's article aforesaid, in the London Lancet, and ascribing the discovery exclusively to Mr. Morton, at a time when the medical faculty of Boston unanimously allowed the suggestion, at least, of the new application of ether, to have originated with Dr. Jackson? It is but just to Mr. Bowditch to suppose that his mind has probably, however unconsciously, been warped by an influence "behind the throne."

The editors are aware that an attempt has been made to prejudice the public mind against Dr. Jackson's claims to the discovery, by the alleged fact, that he has always declined to submit them to suitable arbitration. We do not propose to inquire how far the advocates of Mr. Morton have succeeded in this effort, nor shall we attempt any review of the correspondence which passed between Dr. Jackson and Mr. Morton upon this subject. It has no connection with the real question to be decided, and, as a mere collateral issue, should be avoided. The fact is simply this: Dr. Jackson originally expressed his willingness to submit his claims to a just arbitration, and he has been anxious to have them carefully scrutinized. His friends, however, and eminent legal counsel in his behalf, have opposed any such reference, upon the ground that he would be unprepared to meet the false testimony which would be manufactured against him, and the event has shown that these apprehensions were well founded.

The public attention is invited to the following statement of facts.

JOSEPH L. LORD, }
HENRY C. LORD, } *Counsellors at Law.*

Court Square, Boston, 18 May, 1848.

CHAPTER I.

There is no evidence that previously to the thirtieth of September, A. D. 1846, on which day, according to both Dr. Jackson and Mr. Morton, the first surgical experiment in etherization took place, Mr. Morton was acquainted, more or less, with the idea that sulphuric ether might be rendered available as an agent for safely producing insensibility to pain during the performance of surgical operations, or that previously to the aforesaid date, he had ever made either sulphuric or chloric ether a subject of study or experiment with any such reference.

Mr. Morton asserts, and attempts to prove, the contrary of what we have just stated, by the testimony of Francis Whitman, William P. Leavitt, Thomas R. Spear, Jr., and Grenville G. Hayden.

In the spring of 1847, and "shortly after Mr. Morton claimed etherization as his own discovery, these four witnesses were taken by Mr. Morton into a room in his office, where they were examined together, and their testimony drawn up, the gentleman who was at the head of the surgical department in the office being meanwhile dismissed from their presence."—See affidavit of D. P. Wilson.

Immediately afterwards, these witnesses, "all at once, and for the first time," began to talk of the alleged facts sworn to in their testimony, which was the more noticed from the fact that, during the fall of 1846, and the greater part of the ensuing winter, "Dr. Jackson had been uniformly spoken of by all connected with the office," not excepting these very witnesses, "as the sole discoverer of the new application of the vapor of sulphuric ether."

These witnesses all testify to a demijohn of ether, alleged by Mr. Morton, in his memoir to the French Academy, and by the witnesses, Leavitt and Spear, in their affidavits, to have been purchased of Messrs. Brewers, Stevens, and Cushing, by the said Leavitt, about the first of August, 1846; which ether is alleged by Mr. Morton in his memoir, and the witness Hayden in his certificate, to have been *sulphuric* ether. The witness Whitman alludes to the same demijohn, and Spear testifies to having inhaled a portion of the ether which it contained. All of which, as suspicious as it looks of concert between Mr. Morton and his witnesses, might possibly have some effect as evidence, were it not in proof that *no such demijohn of ether, as is alleged, was ever bought of Messrs. Brewers & Co.*

Boston, May 8th, 1848.

I, William A. Brewer, of Boston, County of Suffolk, and Commonwealth of Massachusetts, of the firm of Brewers, Stevens, & Cushing, of this city, on oath depose and say, that we have never kept or sold any other quality of sulphuric ether than the best manufactured in the American market.

The only quality of sulphuric ether kept or sold by us, in the summer of eighteen hundred and forty-six, and the month of September of the same year, as I have ascertained by careful inquiry and comparison, was inferior to no quality of sulphuric ether which was, at that time, to be found in the

Boston market—it being the best official or sulphuric ether of commerce.

We have *never* kept or sold a quality of sulphuric ether such as is alleged by Mr. W. T. G. Morton to have been purchased of us in August, 1846, and which was analyzed for Mr. Morton, by Dr. Martin Gay, of this city, as appears in Mr. Dana's pamphlet, No. 201 of Littell's Living Age page 536.

WM. A. BREWER.

SUFFOLK, ss. BOSTON, May 19th, 1848.—Personally appeared, the aforesaid Wm. A. Brewer, and made oath that the foregoing affidavit, by him subscribed, is true. Before me,

S. W. ROBINSON,
Justice of the Peace.

[The Editors are in possession of still further testimony, verifying the statements contained in the foregoing affidavit, but the said affidavit is deemed amply sufficient to prove the point for which it is introduced.]

That Messrs. Brewers & Co.'s was the place where the alleged ether—supposing it to have been purchased—*was* purchased, cannot be denied; for Morton, Leavitt, Spear and Hayden all so state: nor can it be pretended that it was chloric, and not sulphuric ether which was purchased; for Hayden certifies that he kept the very demijohn constantly in his possession, until the twenty-second of June, eighteen hundred and forty-seven, and on that day, he had a portion of its contents analyzed; and he produces the analysis of Dr. Martin Gay, and the certificate of Mr. Burnett, both of this city, that it was *sulphuric* ether. That sulphuric ether was taken to Dr. Gay, for analysis, there can be no doubt; and that certain ether taken to Mr. Burnett, to be pronounced sulphuric ether, was so pronounced, and truly, there can also be no doubt; but that it was the slops and drainings of Mr. Morton's sponges and inhalers, and of ether, too, bought after the 30th of September, both from the analysis of Dr. Gay and a sample of the same now in our possession for the benefit of the sceptical and curious, there is just as little room to doubt.

But there is still other evidence of there being no demijohn of sulphuric ether in Mr. Morton's office, either in the summer, or in September, of 1846.

Mr. Tenny says: "I was occasionally in and out of Mr. Morton's office, from about the 10th of September, 1846, until the first of October next ensuing; all the different rooms of the office were accessible to, and visited by me; there was no evidence of a demijohn of sulphuric, chloric, or any form of ether there during the said interval of time. I think there could not have been any sulphuric ether in the office without my having detected its odor, if it had been used."

Mr. Wilson was "quite frequently in and out of Mr. Morton's office during the month of September, and also the preceding summer months, and never heard Mr. Morton allude to sulphuric ether," and "never perceived its odor about his person, or otherwise." Mr. Hunt, who was an assistant in the office in the summer of 1846, uses still stronger language to the same effect.

So that if there was sulphuric ether in Mr. Morton's office, there is no probability of its having been used; which is no better for Mr. Morton's claims than if there had been none there. Again, it is not possible to discover any reason why Mr. Morton should have bought so large and unusual a quantity as a demijohn of sulphuric ether at this time. What could have been his *motive* or *inducement*? Mr. Morton pretends to but two experiments with sulphuric ether, previously to the purchase here alleged—one upon a water-spaniel, which we shall prove directly could never, in any probability, have been performed, and one upon himself, a few days previous. But it is also in proof, that Mr. Morton, as late as November, 1846, "had never, in any instance, inhaled the ether, excepting in the atmosphere about him," and that he never, during the fall of 1846, or the ensuing winter, gave any of his assistants reason to suspect that he had ever inhaled it, but every reason to suspect the contrary, from his most manifest fear of its effects. We can disprove, still more completely, this pretended experiment upon himself. Mr. Morton says that the ether which he inhaled was purchased by Mr. Hayden, at the apothecary store of Mr. Burnett, early in August. Mr. Hayden certifies that Mr. Morton, having inhaled it, informed him of the fact. But Mr. Hayden has since stated—as will appear by the affidavit of Mr. Blaisdell—"that the ether to which he swore as having been made use of by Mr. Morton, previously to Sept. the 30th, was chloric, and not sulphuric;" and Mr. Morton himself, at the time Mr. Hayden made this statement, substantially and emphatically admitted that such was the fact; and Mr. Morton has also given Dr. Gay distinctly to understand that there was no reference in the affidavits of his witnesses, to sulphuric ether. How absurd, therefore, that Mr. Morton should have commenced his experiments by the purchase of a whole demijohn of sulphuric ether!

We thus prove, that no demijohn of sulphuric ether was purchased of Messrs. Brewers & Co., about the first of August, as alleged;

Secondly: That it is wholly improbable that sulphuric ether, in any quantity, was purchased of any one; or, if purchased, that any use was made of it in Mr. Morton's office;

And, *thirdly*: That there was no ostensible reason why any should have been purchased.

Again; Thomas R. Spear, Jr., one of the four witnesses under consideration, states, in his affidavit, that, "about the first of August he inhaled some of the very ether brought by Leavitt from Messrs. Brewers & Co., in a demijohn, in Dr. Morton's office." There was not only no such ether to inhale, but Spear did not inhale sulphuric ether at all until the November following. Mr. Hunt details the circumstances of Spear's first inhalation of the ether. One evening Spear and Leavitt endeavored to induce, one the other, to inhale it. Spear at length consented, and handled a stranger in the office quite rudely while under its influence. Upon coming to himself, he apolo-

gized for his rudeness, asking the stranger to excuse him, "as this was the *first time* he had ever taken the ether." Hunt, thinking it barely possible that Spear might have intended this as only an apology, after the gentleman had left, asked Spear "if the ether had ever affected him in the same way before?" "No," he replied, "for I never took it before." Hunt speaks of other circumstances which fully satisfied him, at the time, that Spear told him the truth.

I, George H. Hayden, of Calais, in the State of Maine, on oath, depose and say, that I came to Boston to reside, in the fall of 1846, and resided there from the first of the month of November until the month of January next ensuing; that some time in the month of November of that year, Thomas R. Spear, Jr., stated to me that the evening before he had, for the *first time*, inhaled the vapor of sulphuric ether, in the office of Dr. Morton, and that it excited him very much; that while under its influence he seized a stranger who was in the office. Spear stated to me, distinctly, that he "had never inhaled the gas before." He said that it produced delightful sensations; and I feel quite sure, from the manner in which Spear spoke of the circumstance, that he stated to me the truth, and had never inhaled the vapor before that time.

GEORGE H. HAYDEN.

SUFFOLK, ss. April 24th, 1848.—Sworn to, before me, S. W. ROBINSON,
Justice of the Peace.

Wilson also testifies that Spear, about this time, "suddenly commenced inhaling the ether, and was afterwards in the habit of inhaling it continually;" which strongly confirms Hayden and Hunt.

But we should feel perfectly justified in disbelieving Spear's account of his inhaling the ether in August, from the circumstance alone that there was no such ether to inhale, as that which he positively asserts that he did inhale.

William P. Leavitt, another of the four witnesses, describes the inhalation, by Spear, of Messrs. Brewers & Co.'s ether, bought by himself, quite minutely and vividly. He tells us, moreover, that Hayden was an eye-witness to the same experiment. What does Mr. Hayden say about it? It was the first experiment he had ever witnessed; the first which Mr. Morton says he performed on a human being. According to Mr. Morton and Leavitt, it was attended with very striking and remarkable effects, which they remember most distinctly. Hayden simply says that Mr. Morton "*tried to induce*" Spear "to take it." Will Mr. Hayden say that it was at a different time that Mr. Morton "*tried to induce*" Spear "to take it?" Grant it. Is Leavitt not to be believed because he says that Mr. Hayden was an eye-witness to this experiment; or, is Hayden not to be believed because, having been an eye witness, he has told us nothing about it; or was it concluded, at the taking of the testimony, that Morton, Leavitt and Spear would be witnesses enough to this experiment?

We dismiss Leavitt with three words more. First,

he went to Messrs. Brewers & Co.—supposing him to have gone—with a lie in his mouth as to whom he wanted the ether for; second, he did not go there, as he alleges; third, he swears to an experiment with the very ether that he says he bought, which we have proved never to have been performed.

But Spear's is not the only experiment pretended. Hayden tells us that Morton informed him, in August of 1846, that he had just inhaled the ether, and on the 30th of September following that he had also inhaled it on that day. This latter is the experiment of which Mr. Morton gives such a glowing and detailed account in his memoir.

But Hunt gives us the circumstances in full under which Mr. Morton stated expressly to him, in the following November, that "he had never, in any instance, inhaled the ether excepting only in the atmosphere about him." It is, moreover, very remarkable that Mr. Morton never, during the whole fall of 1846, alluded to either of the two experiments upon himself, or gave Wilson or Hemmenway, his two principal operators, any reason to suspect that he had performed them, and should have manifested such a constant fear of its effects upon himself, as is testified to by them. Can any further evidence be required that Mr. Morton stated falsely, to Mr. Hayden, that he had inhaled the ether, whether it be once or twice?

Mr. Morton also described to Mr. Hayden an experiment performed by him upon a dog—the water-spaniel of Mr. Morton's memoir—"in the presence of two witnesses." The animal "at first wilted completely away, then roused, yelled loudly, and leaped *ten feet* into a pond." Please to take notice that the effects produced on this dog, as described, "exactly corresponded" to the effects produced upon human subjects in Mr. Morton's office even as late as March the 25th, 1847, as "witnessed and sworn to" by Mr. Hayden himself.

We look in vain for at least one of the two witnesses to this, the only experiment, in addition to the one upon Spear and the two upon himself, pretended by Mr. Morton in his testimony to have taken place, previously to the 30th of September. We have already proved that the three last named were never performed. This, therefore, was his only experiment. Must he not have known it, and does he think it unimportant to attempt to prove it by testimony of any kind? Are the two witnesses "spirits of the vasty deep" that "would not come," or have they forgotten the experiment, or has Mr. Morton forgotten who they were? Would that *Æsop* might live again to give speech to the dog! We would gladly abide by his testimony, either as to his having inhaled the ether at all, or as to his having leaped the ten feet.

We have said that "Dr. Jackson was uniformly spoken of, in the fall of 1846, and the greater part of the ensuing winter, by *all* connected with Mr. Morton's office, as the sole and exclusive author of the new discovery." In proof whereof,

see Hemmenway. "The 'common report' of the office during the first months of the application of the new agent, known as it must have been to Mr. Morton, and uncontradicted, so far as I know, by him or by any one, ascribed the authorship of the new discovery exclusively to Dr. Jackson." Wilson and Hunt fully sustain this language of Hemmenway's. Wilson speaks of this ascription of the discovery exclusively to Dr. Jackson, as "an every day remark."

Now these four witnesses yielded an entire assent, during the said fall and winter, to this "common report," which assent alone, by well-settled principles of evidence, would be conclusive as against any subsequent statements, indicating a changed or opposite belief, no new facts having transpired, no reason being assigned, and it being impossible to discover any, why they should have changed their minds.

But we do not rely upon their silent assent alone. Spear told Hunt, in a walk to East Cambridge, that "Mr. Morton first obtained 'the gas' from Dr. Jackson at his laboratory, on the 30th of September; that he had tried it, and it worked first-rate; and that he had since then continued to use it under the directions of Dr. Jackson." This was late in October, or early in November, 1846. Francis Whitman assured Hunt that he had heard the truth in Spear's account. Hunt says he cannot be deceived as to the belief of Spear, at the time of the above statement that Dr. Jackson was the exclusive author of the new discovery.

If, therefore, the silent assent of these witnesses to the one voice and one mind of the office is not conclusive against their subsequent testimony, certainly their open, explicit, and voluntary declarations must so be taken.

At any rate, it is a very remarkable fact that these witnesses, immediately upon the taking of their testimony, did "*all at once, and for the first time,*" begin to harp upon the before-named experiments pretended to have been performed by Mr. Morton previously to the 30th of September; the experiment upon the water-spaniel—the two experiments of Mr. Morton upon himself—the demijohn bought of Brewers, Stevens & Cushing—and the inhaling of that very same ether by Spear.

We dismiss these witnesses with one word more touching Mr. Hayden. Hayden stated to Mr. Blaisdell, in June or July, 1847, that when he swore in his affidavit that Mr. Morton had used ether in the summer and September of 1846, "he knew it was chloric ether, but he thought he would write it as he did, and let people draw what inferences they pleased." Does not this show a manifest determination in Mr. Hayden to deceive the public by his testimony, and does it not cast a still more fatal suspicion upon the mysterious circumstances under which it first saw the light?

R. H. Dana, Jr., Esq., and Dr. Francis Dana, Jr., infer from Mr. Morton's having mentioned to them, in the summer of 1846, that "he was engaged upon something which, if successful, would revolutionize the practice of dentistry," that Mr

Morton alluded to the ether discovery. Messrs. Wilson and Hunt will inform the Messrs. Dana what it was to which Mr. Morton was accustomed to apply the very words addressed to them. Says Wilson, "During the summer of 1846 I often heard Morton speak of a new discovery which he was about to publish to the world, to which he was giving his whole energies, and which, in his own words, 'would revolutionize the whole practice of dentistry, and secure to him a fortune;' but he never hesitated to tell me that it consisted of a new composition for filling teeth, and a new mode of making teeth and setting them to plate." Wilson adds that "this was Morton's great hobby in the summer of 1846, and in September of the same year." Hunt tells us that Morton spoke to him of these improvements as being a discovery, which, in Morton's own language, "would enable him to uptip and monopolize the whole practice of dentistry in the city, and be worth one or two hundred dollars a day to him."

It thus appears that Mr. Morton's time and energies were almost wholly consumed, in the summer and early autumn of 1846, with this last-named discovery. It is probably this discovery, and Mr. Morton's use of chloric ether for the purpose of destroying the sensibility of teeth, as appears from Wilson, which constitute the groundwork of the disjointed and ragged recollections to which Mr. Morton's witnesses swore, so far as there is any groundwork to their recollections at all.

CHAPTER II.

The letters of Messrs. Metcalf and Wightman are relied upon as evidence that Mr. Morton was, on the thirtieth day of September, A. D. 1846, more or less acquainted with the *idea* and *use* of the new application of sulphuric ether. Less importance will be attached to letters such as these, by cautious readers, than to statements given under oath. There is nothing like an oath to fasten honest witnesses, which both of these gentlemen unquestionably are, to the letter of their recollections. The witness himself attaches greater importance to statements thus given, and is more careful and definite.

Testimony of so extremely indefinite a character as that contained in the letter of Mr. Wightman, would be rejected in a court of law, as not being entitled to weight as evidence, unless there should be accompanying testimony to give it definiteness, which in the present case is most sadly wanting.

Mr. Wightman says that his acquaintance with Mr. Morton commenced in the summer of 1846. We are enabled to approximate, in some measure, to the date, with the assistance of Mr. Chamberlain. Mr. Chamberlain testifies, that "*late in the summer, or early in the autumn,*" Mr. Morton called on him to obtain gas bags for a blow-pipe apparatus, an instrument which Mr. Morton probably needed to carry on the improvements which we have shown him to have been engaged upon in mechanical dentistry. Not being satisfied with

Mr. Chamberlain's prices, Mr. Morton asked such apparatus was made elsewhere in the city Mr. Chamberlain referred him to Mr. Wightman when Mr. Morton asked who Mr. Wightman was and where was his place of business! Mr. Wightman's first acquaintance with Mr. Morton must, therefore, have been *after* this interview. Mr. Wightman says that his second interview with Mr. Morton took place "*within a few weeks,*" he should think," after the first, and according to the testimony of Mr. Morton, it could not have been until after the middle of September, when he returned to Boston from the country, where he had gone early in the month of August.

Approaching thus nearly by the testimony of the other party to the month of October, we can attach very little value to a circumstance by which Mr. Wightman says that he enables himself to remember that it occurred before the 28th of September, especially as that circumstance is withheld by him. Again; for what purpose did Mr. Morton seek his second interview with Mr. Wightman? Mr. Wightman tells us that it was to ascertain the effect of sulphuric ether upon India rubber bags. Is it not, therefore, in the highest degree probable, that the interview in question took place at the time when Mr. Morton, *after* the 30th of September, first set about inventing some apparatus for the inhalation of sulphuric ether? Is it not likely that Mr. Morton, when he left Mr. Chamberlain's, went directly to Mr. Wightman, and asked him, as he had Mr. Chamberlain, concerning the different gases and bags which he might use in connection with the blow-pipe apparatus, which he was upon at that time; and may not Mr. Wightman have confounded this interview with a conversation or conversations respecting the effect of sulphuric ether upon India rubber bags, when, after the 30th of September, he actually was constructing an inhaler with bags of India rubber cloth? Or, if Mr. Morton did not go to Mr. Wightman from Mr. Chamberlain, has not Mr. Wightman antedated the interview in question a little?—a little, we say, for at the farthest, we come *within a very few days* of one another. A person so extremely indefinite in his dates as Mr. Wightman, is more easily deceived in this regard than he is apt to suppose. If, in point of fact, any conversation took place in the cars, on the 28th of September, between Mr. Wightman and Mr. Morton, in respect to ether as an agent for producing insensibility, it probably had reference to chloric ether, but only as a narcotic for destroying the sensibility of teeth, which, it appears by Wilson, was at that time used by Mr. Morton for this purpose.

That Mr. Wightman is confused and mistaken in his recollection of the date of the interview under discussion, and that Mr. Morton did not consult with him, with regard to the effect of ether upon India rubber, prior to the 30th of September, is also proved by other circumstances. If Mr. Morton was contriving an inhaler with India rubber bags previously to September 28th, why has not Mr.

Hayden recollected the fact, and why have not Whitman and Leavitt and Spear testified to it? Surely it was very material to confirm the statement of Mr. Wightman, and to establish the pretensions of Mr. Morton, and yet these witnesses are all silent upon the matter. Perhaps they will recollect it now!

Notice also the absurdity of Mr. Morton's statement upon this subject. After giving his account of the conversation with Mr. Wightman, he says: "I took from Mr. Wightman's a glass tunnel, *purchased an India rubber bag on my way*, and returned to my office." He went there to procure the same article, and he asked Mr. Wightman to show him some of his gas bags. Why, therefore, did he not make his purchase of Mr. Wightman? Mr. Morton purchased a bag on his way to his office! Where did he purchase it? At whose store? Why has not Mr. Morton fixed the date of his visit to Mr. Wightman, and thereby confirmed the indistinct statement of that gentleman by the testimony of the person of whom he bought the gas bag?

Again, if Mr. Morton had purchased a gas bag prior to the 28th of September, why should he have been in want of another on the 30th of the month, when he went to Dr. Jackson's laboratory to borrow one? Had the former bag, and the one also which Spear swears that he saw in Mr. Morton's office in August, been dissolved by the agency of ether, or was he contriving some very complicated apparatus for its inhalation?

Again, Mr. Morton states, that, upon his return to his office from Mr. Wightman's, he "sent Leavitt to Dr. Gay, a chemist, to ask the simple question, whether ether would dissolve India rubber? He (Leavitt) returned, saying that Dr. Gay was not in." Mr. Leavitt has, however, testified, that he went to call upon Dr. Gay, *but could not find his residence*. He has not, it is true, fixed the day when he went to call upon Dr. Gay for this purpose, but there is no evidence that he was sent twice, and the language which he has put into Mr. Morton's mouth proves that the same transaction is referred to by both parties. Does not this contradiction in the testimony of Mr. Morton and Mr. Leavitt, add greatly to the improbability of the statement of the former.

We submit, therefore, that the account given by Mr. Morton of his alleged visit to the office of Mr. Wightman in September is in the highest degree absurd and improbable, and that the testimony of Mr. Wightman must relate to an interview in the month of October, when, as we do not question, Mr. Morton did call upon him to procure some apparatus for the inhalation of ether.

As to Mr. Metcalf's letter. Mr. Metcalf has stated since his letter was written, that the vial of ether which Mr. Morton held in his hand in Mr. Burnett's store, early in the summer of 1846, was either a one or two ounce vial. We understand Mr. Metcalf will not state on oath that it contained sulphuric ether. He only believes it was so labelled. Mr. Metcalf will not probably swear that Mr. Morton did really purchase the

said vial of ether. Mr. Morton held it in his hand, and he (Mr. Metcalf) therefore supposed that he was purchasing it. Mr. Metcalf will not probably swear that Mr. Morton made, if any, other than the most general inquiries respecting sulphuric ether; or that what was said in regard to ether as a substitute for nitrous oxide, was not wholly volunteered by himself, which is much more likely to have been the case, from the fact of Mr. Metcalf's having had some experience with it as such a substitute. Upon the hypothesis of sulphuric ether, did not Mr. Morton wish to ascertain whether it might not be a better article for destroying the sensibility of teeth, than chloric ether, which he was using? It is also to be noticed that Mr. Morton tells us what he did with the sulphuric ether which he bought at other times. Will he tell us what he did with this? Mr. Metcalf says that this was merely an accidental conversation with Mr. Morton, which "*quickly passed from his mind*," It was brought back to him some time and some where while in Europe, when he first heard of the discovery of the new use of sulphuric ether. Is not this last circumstance all which has led Mr. Metcalf to connect a forgotten conversation with sulphuric ether? Connecting with Mr. Metcalf's letter the other testimony in the case, the hypothesis that Mr. Morton's inquiries were concerning chloric ether, is by far the most reasonable.

As to Mr. Morton's memoir. His story about the water spaniel we have submitted to be untrue. Also the purchase of sulphuric ether by Hayden at Burnett's, early in August. The matter of the demijohn is a *third* falsehood. Spear's inhalation of a portion of its contents, a *fourth*. The analysis of another portion of the contents of the same vessel, a *fifth*. The pretension that if its contents had been a more respectable quality of sulphuric ether, he (Mr. Morton) should have made the discovery in August instead of September, is a *sixth*. His two experiments upon himself, a *seventh* and *eighth*. His account of his interview with Dr. Jackson on the 30th of September, when he thought it necessary to carry his deception to such an extent as to inquire of Dr. Jackson whether sulphuric ether was liquid or gaseous, lest Dr. Jackson "should," in his own words, "snatch the prize from his grasp," is a *ninth*. His statement that he inhaled the ether on the 30th of September, with a *tube and flask*, obtained from Dr. Jackson's laboratory on that day, and which we prove by the sequels to the original affidavits of Barnes and McIntire, that he did not obtain until two or three days after the 30th, is a *tenth*. His account, as appears from Barnes and McIntire, at the laboratory of Dr. Jackson, on Oct. the 1st, that he only inhaled it on the 30th with a *handkerchief*, is the *eleventh*. The account, also, that he inhaled it from a *sponge* on the same occasion, as given by Mr. Edward Warren, and endorsed by Mr. Morton, is the *twelfth*. (Three different accounts, it will be perceived, of an experiment which is proved never to have happened.) His account of an oper-

ation upon the wife and aunt of Dr. Jackson, as will appear from Mrs. Bridge and Miss Bartlet, is the *thirteenth*. His false assertion that his first successful experiment got into the papers without his knowledge, as will appear by the next following affidavit, is the *fourteenth*. But we forbear, not because the reader has been told all the falsehoods in Mr. Morton's memoir, but because we have sufficiently discredited him. We beg the reader's pardon for so far departing from the dignity which belongs to so grave a discussion.

I, A. G. Tenney, of Boston, County of Suffolk, and Commonwealth of Massachusetts, on oath depose and say, that I was an eye-witness to the experiment performed with the vapor of sulphuric ether by Mr. W. T. G. Morton, of this city, at his office, on the evening of the 30th of September, A. D. 1846. I allude to the experiment performed on Mr. Eben H. Frost.

On the following morning Mr. Morton called at the office of the Daily Evening Journal, with which I was then connected, and requested me to insert a notice of the said experiment in the paper of that day. I stated to him that the regulations of the office would require that he should first become an advertiser. In the course of the morning I received word that Mr. Morton had directed the insertion of his advertisement, and thereupon wrote a notice of the experiment aforesaid, which came out in the Journal of the same evening.

The same morning there was considerable conversation between us in relation to the experiment of the preceding evening, in the course of which Mr. Morton stated that he had received the assurances of Dr. Jackson, that the application of the preparation which he had used was *perfectly safe and harmless*. Mr. Morton, a few days afterwards, repeated the same statement to me.

I was occasionally in and out of Mr. Morton's office, from about the 10th of September, A. D. 1846, until the first of October next ensuing. All the different rooms of the office were accessible to and visited by me. There was no evidence of a demijohn of sulphuric, chloric, or any form of ether in the office, during the said interval of time. I think there could not have been any sulphuric ether there, without my having detected its odor, if it had been used.

I never saw Mr. Morton administer the ether, excepting on the evening of the 30th of September aforesaid, although connected with his office from the 12th of October, 1846, until after the commencement of the year 1847.

From the statements and expressions of assistants in the office, I was led to conclude that they had no confidence in Mr. Morton's knowledge of the nature and proper application of the ether. Mr. Morton appeared to have little or no connection with the responsibility of their experiments.

A. G. TENNEY.

We come now to the 30th of September. We have followed Mr. Morton through with all his testimony up to this date. We have endeavored faithfully and fairly to discuss every material item of it. We now stand with Mr. Morton, in the laboratory of Dr. Jackson. We ask Mr. Dana, we ask the chairman of the committee of the Trustees of the Massachusetts General Hospital, who

attempts to justify, with such zealous advocacy the pretensions of Mr. Morton, what knowledge Mr. Morton had, on that day, which he *could* have concealed from Dr. Jackson? What evidence is there of any? What evidence is there that Mr. Morton had ever made the new application of sulphuric ether a subject of previous observation, inquiry, study, or experiment? Mr. Morton tells us, in his memoir, that he kept back, at the interview with Dr. Jackson, the knowledge at which he had arrived, as the result of his studies and experiments, lest Dr. Jackson should suspect his discovery, and steal it from him. Observe that we have to depend upon Mr. Morton's word alone, the value of which we believe we have, in the most effectual way possible, already submitted to the public, for the only account given us of this piece of deception. Mr. Morton's account has been substituted by Mr. Bowditch and Mr. Dana, in the place of the simple and straightforward narratives given by Barnes and McIntire, in their affidavits, of the circumstances in full, of this interview. It is now in our power to add yet a third narrative of this interview, agreeing with those of Barnes and McIntire, almost letter for letter, and "received by Mr. Wilson," without solicitation, "from Mr. Morton's own lips, in November, 1846." Says Wilson, Mr. Morton related to me the following facts. "On one occasion a lady called at the office to procure a set of artificial teeth. It became necessary to extract several stumps. The lady was timid and sensitive, and shrank from the operation. In order to prevail upon her to submit to the instrument, I determined in some way to act upon her imagination, and for this purpose went to the laboratory of Dr. Jackson, to procure an India rubber bag, which I proposed to inflate with atmospheric air, and then persuade the patient to inhale from it, stating to her, at the same time, that she would experience no pain from the operation. Dr. Jackson scouted the idea of practising any such deception, directing me to administer the vapor of sulphuric ether, with a handkerchief or folded cloth, which would render the patient insensible, when I could extract her teeth without her knowing it. I instantly seized upon the new idea, and immediately commenced my first experiments with the ether." These are admissions made voluntarily by Mr. Morton himself against his own interests—the highest evidence known to the law.

These three narratives taken together, place beyond a doubt Mr. Morton's total ignorance, on the 30th of Sept., of the properties and effects of sulphuric ether; Dr. Jackson's knowledge of its perfect safety and applicability as an anæsthetic agent, his communication of the discovery to Mr. Morton, and the committing to him, as his agent,—with the requisite and specific instructions, and an express and actual assumption of the whole responsibility—of the first surgical experiment and testing of the new agent. The perfect newness of Mr. Morton's delight upon receiving this trust, was equalled only by his ignorance of the agent intrusted to him.

CHAPTER III.

Dr. Jackson's mind is to be seen no less clearly in the demonstration than in the authorship of the new discovery. Mr. Morton, because his hand extracted the first tooth without pain to his patient, is no more to be considered the discoverer of the new use of ether, than the sailor who first shouted "Land!" from mast-head, and not Columbus, is to be considered the discoverer of the New World. Taking the authorship of the idea—or the demonstration of it—it is Dr. Jackson's mind only which we see. It was his mind only which Mr. Morton himself saw, during the early application of the new agent. It was his mind alone which was recognized by the assistants in his office, and made by them their exclusive guide in the demonstration of the discovery.

We care not whether Mr. Morton, by the word "discovery," means "authorship," or "demonstration," one or both. During the early application of the ether in his office, he unhesitatingly proclaimed Dr. Jackson its "sole and exclusive discoverer." And Mr. Morton said this, we have not a doubt, because he saw Dr. Jackson's mind in all, and over all, authorship and demonstration alike. It was the tribute which his own good sense, and the good sense of the ether operators of his office, and the force of an urgent practical truth, compelled them to pay to the mind which guided and directed the whole operations of their hands. On these points, let us listen first to Mr. Morton, and then to his "ether corps."

Says Wilson, "Mr. Morton, in November, 1846, stated to me that 'he was indebted to Dr. Jackson for the idea of the new application of ether, and had received instructions from him how to apply it.'"

Again: "Respecting the authorship of the discovery, I do not feel the least embarrassment or doubt; for my opinion has been wholly founded upon the narrative and declarations of Mr. Morton, in which uniformly, and without reserve, he ascribed its authorship to Dr. Jackson, never speaking of himself, otherwise than as the first and fortunate person to whom Dr. Jackson had communicated it."

Robinson. "Mr. Morton unreservedly admitted that there was some one behind himself connected with the discovery, as its originator, and that Dr. Jackson was that person."

Blaisdell. "Mr. Morton stated that the idea of employing sulphuric ether, for the purpose before mentioned, was first suggested to him by Dr. Jackson. I asked him, therefore, if it was Dr. Jackson who made the discovery? Mr. Morton at once answered that he did, and that Dr. Jackson had communicated it to him, with instructions as to the proper mode of applying the ether, and that having acted in accordance with his advice, his (Morton's) practice had been successful, the result in every way answering to Dr. Jackson's prediction. I met Mr. Morton frequently afterwards, and conversed with him upon the subject of ether. He uniformly made the same declarations, awarding the discovery to Dr. Jackson."

Payne. "During this interview," (at Mr. Morton's office, Jan. 2, 1847,) "Dr. Morton stated, repeatedly and emphatically, that Dr. Charles T. Jackson was the sole discoverer of the new agent for producing insensibility to pain, and that Dr. Jackson had communicated it to him. Furthermore, that all the knowledge he possessed, of its properties and its application, had come to him from Dr. Jackson, and that he had never had any idea of applying sulphuric ether, or that it could be applied, for the aforesaid purpose, until Dr. Jackson had suggested it to him, and given him full directions for applying it."

Dr. Payne is recommended to our confidence by Hon. A. R. Hadley, Speaker of the House of Assembly of the State of New York, and by other highly respectable citizens of that state, as a gentleman of truth and veracity, "and as standing among the first in his profession."

Did Mr. Morton ascribe the discovery to Dr. Jackson, in the strong language which has been given, in order to inspire confidence in it, in the mind of Dr. Payne, and thereby induce him to purchase a right under his patent?

But Dr. Payne, when he came to this city, had already used the ether for a considerable time, had investigated its properties, and fully tested its applicability for the purposes of its newly-discovered use. An "injunction" had been served upon him in Troy. He came to Boston, not for information, but protection. His business was with the proprietor of the patent, not with the author of the discovery. Mr. Morton "offers to call with Dr. Payne upon the author of the discovery, who will give him any information he may desire." But no; Dr. Payne cannot be better convinced than he is already, or better assured, even by one of the best chemists in the country, of the perfect practicability and safety of the new agent.

What motive had Mr. Morton to tell a gentleman, upon whom he must have known Dr. Jackson's assurances could have no weight or influence, that the discovery belonged exclusively to Dr. Jackson? *It is not human nature* thus voluntarily to admit away a discovery, of which the magnitude and greatness were so fully foreseen. Mr. Morton's declarations to Dr. Payne are inexplicable upon any other hypothesis than that he believed what he stated.

There are many others who came to Mr. Morton under precisely the circumstances which brought Dr. Payne to this city, and to whom he made the very same statements.

Now as to the ether corps of the office:—

I, L. E. Hemmenway, of Boston, County of Suffolk, and Commonwealth of Massachusetts, on oath depose and say, that I was an assistant dentist in the office of Mr. W. T. G. Morton, of this city, from about the 15th of October, A. D. 1846, until after the commencement of the year 1847.

While in Mr. Morton's office I formed the belief that Dr. Charles T. Jackson, of this city, was the first and exclusive discoverer of etherization. This belief I was in the habit at the time of frequently

declaring to others. I founded it upon the fact that in all questions, which arose in the office, touching the nature and properties of sulphuric ether, and the judiciousness and safety of its application, (and they were of almost daily occurrence during the early period of its application,) the decision and instructions of Dr. Jackson were required by the operators, and obtained, either by Mr. Morton himself, or his brother-in-law, Mr. Francis Whitman. I founded it also upon the fact, that during the early application of the ether, Mr. Morton neither appeared nor pretended to have any knowledge of its nature and effects, excepting as derived from Dr. Jackson; upon the fact, that Dr. Morton never, to my knowledge, inhaled its vapor, or spoke of having inhaled it, or, excepting in one instance, applied it to a patient in the office himself, during its early application; upon the fact of his constant repetition of the assurances of Dr. Jackson, that the vapor of pure sulphuric ether, as an agent for producing insensibility to pain, during the performance of our dental, and of all surgical operations, was perfectly safe, if judiciously administered; upon the fact, that he cast the whole responsibility of the consequences which should result from our experiments, upon Dr. Jackson and ourselves; upon the fact, that the occasional directions which he hazarded upon his own responsibility, were at variance with those brought to us, as aforesaid, from Dr. Jackson, that they were regarded by us as injudicious, and that, as a general thing, we did not dare to follow them; upon the fact, also, that the "common report" of the office, during the first months of the application of the new agent, known, as it must have been, to Morton, but never, so far as I know, contradicted by him or by any one, ascribed the authorship of the new discovery exclusively to Dr. Jackson.

So intimately was Dr. Jackson connected, by his directions, instructions, and authority, coming to us as aforesaid, with all of our experiments, and so entirely did we distrust and set aside Mr. Morton's own unadvised directions, that if etherization had resulted in a failure, I should have considered it the failure of Dr. Jackson, and not of Mr. Morton.

I have heard Mr. Morton state, that Mr. R. H. Eddy, of this city, would not, as he had stated to him, take the sum of sixty thousand dollars, for his (Mr. Eddy's) interest in the patent taken out upon the new discovery.

L. E. HEMMENWAY.

SUFFOLK SS. Boston, May 4th, 1848. Sworn to by the said Hemmenway this day, before me,
S. W. ROBINSON,
Justice of the Peace.

Hunt tells us, "Dr. Jackson's directions and instructions were made the rule of all our experiments. The directions which Mr. Morton sometimes gave us we did not think it safe to follow, they being generally rash and injudicious."

Says Wilson, "In my administration of the ether I was guided by, and relied solely upon, the advice and assurances of Dr. Jackson, received through Morton. *We did not dare to follow Morton's own directions.* If we had followed even the few which he volunteered upon his own responsibility, and not confined ourselves strictly within the directions and authority of Dr. Jackson, received as aforesaid, and the teachings of our own observation and experience, I have no doubt that dangerous, and even fatal results would have

ensued, and etherization at that time have resulted in a failure."

Tenney tells us, that "From the statements and expressions of assistants in the office, I was led to conclude that they had no confidence in Mr. Morton's knowledge of the nature or proper application of the ether. Mr. Morton appeared to have little or no connection with the responsibility of their experiments."

One word as to the gentlemen whose testimony we have produced. Among them are included all who were ether operators in Mr. Morton's office in the fall of 1846, excepting Mr. Hayden, the same who belongs to Mr. Morton's coterie of witnesses, who administered it but occasionally, when there was more than ordinary pressure of business. The gentlemen produced by us have hitherto observed a strict neutrality and silence. Animated by the "*esprit du corps*," they were unwilling to say anything which might affect unfavorably him whom they had served; but they have at length felt it to be their duty to the public to expose, by the statement of facts, which, from the circumstances of their connection with Mr. Morton, lay peculiarly within their knowledge, the gross and high-handed imposture which they have seen him attempt to practise upon the world.

It has been charged upon Mr. Barnes, that his testimony wants in accuracy, for the reason that six or eight months elapsed after the conversation which he relates took place, before it was put to writing by him. If this length of time had elapsed beforehand, it would be a proof of nothing but the astonishing accuracy and fidelity of his memory, for his narrative is almost literally verified by Mr. Morton's narrative to Wilson, in Nov., 1846, already given. But no such length of time did elapse; Mr. Barnes' testimony was all in writing, *within six weeks* after the conversation occurred, of which we have abundant proof.

To conclude the argument of the preceding chapters; we have in our possession a copy of a "Statement," by Dr. Augustus A. Gould, of this city, drawn up in the earlier period of the controversy, in fulfilment of an understanding with Mr. Morton, and expressly purporting to state the whole ground of Mr. Morton's claims to the discovery of etherization. No mention whatever is made in this "Statement" of any studies or experiments of Mr. Morton previously to the 30th of September, 1846.

Again; why did not Mr. Morton, when R. H. Eddy, Esq., his counsel in taking out a patent on the new discovery, stated to him that "Dr. Jackson should be made a party to the instrument, inasmuch as he had first suggested the new application of the ether,"—why, we ask, did Mr. Morton not tell Mr. Eddy that the idea was, in some measure, at least, the result of his previous studies and experiments, and why did he assent fully that the suggestion came entirely from the source to which Mr. Eddy ascribed it, and then proceed directly to confirm that assent by conduct so naturally the result of it?

CHAPTER IV.

The idea of the applicability of sulphuric ether as an agent for producing insensibility to pain during surgical operations, was perfectly well known to the mind of Dr. Jackson before the 30th of September, A. D. 1846; and on that day Dr. Jackson, through Mr. Morton, introduced, for the first time, the new agent into the surgical practice of the medical and dental professions. In substantiation of which proposition we quote Dr. Gay:

Dr. Jackson was for many years in the habit, when at work in his laboratory, of inhaling occasionally to a greater or less extent the vapor of sulphuric ether, to relieve the irritation produced by the various noxious fumes to which he was at times exposed. He knew that a long continued inhalation of it was supposed by physiologists to be dangerous; and about six years ago—with a view of observing fully the effects of this inhalation—he breathed the vapor for a longer time than he previously had done. In this experiment, a peculiar sleep or unconsciousness was produced; he observed that it was of short duration, attended with no unpleasant sensations, and no symptoms which seemed to him to be dangerous. In the winter of 1841—42, he inhaled sulphuric ether in order to obtain relief from the very unpleasant sensations, caused by an accidental inhalation of chlorine gas. He thought that in this case some relief might possibly arise from the union of the hydrogen of the ether with the chlorine, forming hydrochloric acid; which acid would be less irritating than the uncombined chlorine; and he inhaled ammonia, to neutralize the acid, and form muriate of ammonia, less irritating still. He at first breathed the ether without producing unconsciousness, but derived from it some relief. Afterwards, still suffering from the chlorine, he continued the experiment to such an extent as to produce complete general insensibility. Full relief from the suffering was experienced *before* he became unconscious, and it continued for a short time *after* the insensibility had passed away. When the system had become wholly free from the influence of the ether, the painful sensations returned, although with somewhat diminished violence.

Dr. Jackson also prescribed the ether to one of his students, Dr. William F. Channing, who was suffering in the same manner from chlorine gas. The effect of the chlorine was to produce a spasmodic sensation, and, to quote Dr. Channing's own words, "distress of respiration, of such a character, as to make me apprehend an immediately fatal result." He also found entire, but temporary, relief from the ether. It was evident, therefore, as this perfect relief from suffering, at first experienced, so soon passed away, that there must be some other explanation of these effects, besides that founded on the possible neutralization of the chlorine by the hydrogen of the ether, and of the acid by the ammonia; because, if these combinations of chlorine and hydrogen, and of the acid and ammonia, had once been formed, they would have been permanent; and the relief, having been a result of these combinations, would have been permanent also. This was not the case, for the peculiarly unpleasant sensations from the chlorine returned, although with less violence.

The question now arises, how far is Dr. Jackson entitled to the credit of having discovered the precise character of the unconsciousness induced by

inhaling the vapor of sulphuric ether, and especially the important fact of the safety of the inhalation? Before his observations, a state of complete insensibility from this cause, was considered, by the best authorities, as one of greater or less danger; and it had been known to produce fatal results. Young persons had breathed this vapor to the extent of producing unconsciousness, and in some cases without injury. In Philadelphia it was breathed by some lads, who poured the ether into bladders, which they dipped into hot water, in order to vaporize it; they then inhaled the vapor thus formed; Dr. Mitchell states that, in some instances, it proved fatal.* These facts give some idea of the state of knowledge upon the subject, before Dr. Jackson made sulphuric ether an object of investigation. Acquainted with the opinions of others, and also with the fact, that this vapor had in various instances been breathed without serious or unpleasant consequences, and having performed bold experiments upon himself, he, at last, in opposition to the opinion of other physiologists, arrived at the conclusion, that the inhalation of a proper mixture of sulphuric ether and atmospheric air is perfectly safe; and that the state of unconsciousness thereby induced has all the various other characters which have been described, and which later experiments have fully established. That he had perfect and unwavering confidence in the correctness of his opinion, will be proved in the sequel. If we contrast the state of general information and belief concerning the effects of sulphuric ether previous to Dr. Jackson's investigations, with that which now exists, and if we recollect that this change is due to him, it would seem but just to admit his claim to have discovered, in the insensibility induced by the sulphuric ether, qualities of inestimable value.

Dr. Jackson conceived the idea, that the pain attending surgical operations might be prevented by inhaling the vapor of sulphuric ether to the extent of producing general unconsciousness. His conviction of the safety, with proper precautions, of inhaling it to this extent, was the first step towards the application of the ether to that purpose. The character of this unconsciousness, in other respects, was all that could be desired. Its principal features, as discovered by him, are, the short time required for its induction, its completeness, its brief duration, the rapid recovery of the patient from its effects, and a certain paralyzing influence upon the nerves of sensation. The difference is remarkable between the effects of this vapor, and those of all other substances, whose action on the system has been investigated. The ether is the only one known to produce the effects just described, and, with proper precautions, is not liable to produce any others, which would render its administration objectionable. It still remained to be ascertained, whether this unconsciousness was so perfect, that, during its continuance, no pain would be produced by wounding instruments. Dr. Jackson confidently believed that it was. Having, as the final result of his experiments and reflection, come to the conclusion, that sulphuric ether combines all the qualities requisite in a substance to be used for the prevention of pain in surgical operations, he selected it for this great purpose.

Dr. Jackson was now prepared to advise without reserve the performance of an operation upon a patient under the influence of the ether vapor. He communicated to several persons, and among others

* Vide Beck's Medical Jurisprudence, vol. ii., p. 678.

to Dr. Bemis, an eminent dentist, in 1842, as is proved by his statement subjoined in the Appendix, his observations and conclusions respecting the prevention of pain in surgical operations.

[That the agent of which Dr. Jackson spoke to Dr. Bemis, was, *in all probability*, pure and washed sulphuric ether, see letter of Mr. Blake, a distinguished chemist, who was formerly superintendent of the Norfolk Laboratory.]

In February, 1846, finding that Mr. Joseph Peabody, a student in his laboratory, wished to be mesmerized, that he might have two teeth extracted without pain, he dissuaded him from the attempt. He informed him that insensibility would be produced by the inhalation of sulphuric ether vapor; he advised him to breathe it, and to submit to the operation, while in the sleep induced thereby. He gave him directions for the purification of the ether; and instructions similar to those which were subsequently given to Mr. Morton, and which were found sufficient for a perfectly successful performance of the operation. All this was voluntarily done by Dr. Jackson, no advice or opinion having been solicited of him by Mr. Peabody. They conversed several times concerning this application of the ether; and Mr. Peabody intended to have the operation performed upon himself, after returning to his home in Salem; and he actually commenced the distillation of the ether for this purpose. He, at last, gave up the experiment, because his father, a scientific man, feared irritation of the lungs might ensue; because the best authorities on the subject were arrayed against the opinion of Dr. Jackson, and because he was unwilling to incur any risk for so slight an operation. Dr. Jackson declared to Mr. Peabody, that, notwithstanding the general opinion of physiologists, he felt perfectly satisfied that he would have incurred no danger.

Late in Sept. 1846, Mr. W. T. G. Morton called at the office of Dr. Jackson, and requested the loan of an India rubber bag, for the purpose of administering atmospheric air to a patient, in order to act upon her imagination, and to induce her to permit him to extract a tooth. He was dissuaded from the attempt by Dr. Jackson. There was also some conversation concerning nitrous oxide. Their conversation upon the above named subjects lasted for some time. It was finished, and no request had been made by Mr. Morton to Dr. Jackson to suggest to him any process, by which teeth might be extracted without pain. Mr. Morton had left the apparatus room, in which most of this conversation had occurred; he went into the office on his way to the street, when he was followed by Dr. Jackson, and stopped by him. Dr. Jackson then informed Mr. Morton, that he could impart to him a means of producing a general insensibility, during which, he was confident, surgical operations might be performed without pain. He communicated to Mr. Morton all that it was necessary he should know, for the performance of this experiment. He informed him, that the substance to be used was the vapor of sulphuric ether. He gave him directions concerning the degree of purity requisite in the ether to be used. He assured him of the certainty of the induction of the insensibility, and of the safety of the operation, if properly performed. He gave instructions in the most minute detail; so that nothing whatever was left for Mr. Morton to devise in any part of the process, for the successful performance of the operation. Dr. Jackson *distinctly* assumed the responsibility of the application.

It is evident from Mr. Morton's inquiry, respecting sulphuric ether, "Is it a gas?" that he was entirely ignorant of its appearance and qualities. He was incredulous as to the results, which Dr. Jackson assured him would be produced, and required repeated assurances from him. Relying on Dr. Jackson's knowledge and authority, Mr. Morton proceeded to his rooms to make the trial.

Thus it appears that Dr. Jackson instructed Mr. Morton upon every point relating to the new application of ether. He did not, to quote an expression often used, suggest merely to Mr. Morton this application for him to consider, whether it was a fit one among others of which to make trial; because Mr. Morton was not qualified to form any judgment about the matter. Dr. Jackson took upon himself the sole responsibility of the act, and would alone have been morally responsible, had the life of the patient been lost.

The ether was administered by Mr. Morton in exact conformity to the instructions of Dr. Jackson. He had procured the ether at the place recommended, and of the purity prescribed by him; he poured some of it upon a handkerchief, and held it close to the mouth of the patient. Insensibility soon ensued, the handkerchief was removed, and the tooth was extracted. The recovery from the insensibility was rapid and entire, and the patient declared, that he had felt no pain from the extraction of the tooth; and no unpleasant sensations during any part of the process. The instructions of Dr. Jackson had been followed in the most minute particular; and his assurances had been in every respect fulfilled.

The next day Mr. Morton called at the office of Dr. Jackson, and informed him of this successful experiment with the ether. Dr. Jackson expressed no surprise, as he expected this result.

The letter of Mr. Caleb Eddy, addressed to the surgeons of the hospital, is relied upon to prove that Dr. Jackson did not, at the time he communicated the discovery of etherization to Mr. Morton, appreciate its value, or foresee the extent to which it might be applied in the practice of surgery. Mr. Eddy states, that after Dr. Jackson had related to him the circumstances under which he had intrusted the discovery to Mr. Morton, he proposed the following question: "Dr. Jackson, did you know at such time, that after a person had inhaled ether, and was asleep, his flesh could be cut with a knife without his experiencing any pain?" To which the reply is alleged to have been given, "No, nor Morton either; he is a reckless man for using it as he does; the chance is, he will kill somebody yet."

Dr. Jackson remembers distinctly the object of his visit to the house of Mr. Eddy, and the conversation which took place at that time. Mr. Eddy has forgotten the general tenor of that conversation, and only remembers the detached expressions recorded in his letter, which, if taken out of their proper connection, would suggest the conclusion referred to. Dr. Jackson has assured the editors, that he called upon Mr. Eddy to protest against the taking out of a patent upon his discovery, and expressed his repugnance to having his name associated in any way with that of Mr. Morton. During the interview Dr. Jackson related to Mr. Eddy his original researches and experiments with sul-

phuric ether, and affirmed that the discovery of its efficacy to destroy the sensation of pain had been made in the year 1842. Mr. Eddy then asked Dr. Jackson, if, at that time, "he was aware, that after the ether had been inhaled, the flesh could be cut with a knife without the sensation of pain?" Dr. Jackson replied, "that he was satisfied it could be done, that he had not the least doubt of it, but still, that an actual operation should be performed before publishing the statement as a fact; and for this reason he gave Mr. Morton instructions to perform a dental operation upon a person under the influence of ether, before publishing his discovery." It appears, therefore, that Mr. Eddy has been able to recollect a part only of his conversation with Dr. Jackson, and that his testimony relates to separate and disconnected sentences, which, read together in the false connection in which he has put them, convey a totally different meaning from what was intended by Dr. Jackson. It is in proof, that, at and before the time of this conversation, Dr. Jackson entertained an entirely opposite belief from what Mr. Eddy would ascribe to him. The testimony of Barnes and McIntire is in point, and proves, beyond a question, that Dr. Jackson could not have used the expressions which Mr. Eddy quotes, and in the connection which he alleges. Barnes states that when Mr. Morton returned to the laboratory with an account of his first experiment, "Dr. Jackson expressed no surprise, but appeared as if he expected the result." McIntire testifies that "during the time he was in Dr. Jackson's laboratory he never heard him express any doubt about the effect which ether would produce in causing insensibility to pain." Peabody testifies that "Dr. Jackson always alluded to the effects of ether with the same confidence, so that when I learned the final success of the application I was not at all surprised." The deposition of Dr. Hitchcock meets this issue directly. Dr. Hitchcock had an interview with Dr. Jackson immediately after the discovery had been tested by Morton, at which time "Dr. Jackson stated that he had the utmost confidence in his discovery, and that he had no doubt that even the most severe surgical operations might be performed upon patients who had inhaled the vapor of pure sulphuric ether, with entire insensibility to pain." The editors are in possession of abundant evidence to the same effect.

Will any fair and unprejudiced mind now doubt that the discovery of the effect of the inhalation of ether to produce a state of complete and safe insensibility, during operations of a surgical nature, was perfect in the mind of Dr. Jackson on the 30th day of September, when he intrusted it to Mr. Morton?

We have no doubt that Dr. Jackson did, at this interview with Mr. Eddy, declare his deep regret at having confided so valuable a discovery to such a man as Mr. Morton; neither do we doubt that Dr. Jackson expressed fear lest the ignorance of Mr. Morton, and his recklessness in the use of ether, might endanger life. The testimony of many witnesses, the operators in Mr. Morton's office,

proves that there was ground for this apprehension. Dr. Jackson did not express his anxiety to Mr. Eddy alone; Dr. Keep states that "Dr. Jackson often said to him, that he regretted very much having first intrusted the discovery of etherization to Mr. Morton, and transferred to him the sole right to apply the agent, for his ignorance of its nature, and his recklessness in ordering its application, might be the occasion of injurious, if not fatal, consequences." The statement of Dr. Hitchcock is also to the same effect.

Hence arose, in part, Dr. Jackson's repugnance to having his name associated with that of Mr. Morton in any public reference to the discovery, and particularly in the "special notices" and advertisements which Mr. Morton inserted in the newspapers far and wide; a fact which his opponents have judged so material in the case. Dr. Jackson would naturally have elected some other and more dignified medium of publishing his discovery to the world, than the quackish advertisements of Mr. Morton.

Dr. Jackson's confidence in the value of his discovery is not to be disproved by such expressions as those imputed to him by Mr. Eddy. All the expressions of distrust attributed to Dr. Jackson were coupled with Mr. Morton's name and recklessness, not with the utility and safety of etherization. Even if he had lost his confidence in the utility of his discovery, the fact could not undo what he had already done. The discovery was already made and known to the world, and every day was adding new proofs of its inestimable value.

The fact of Dr. Jackson's refusing to give Mr. Morton a certificate, as stated by the latter in his memoir, that "ether was harmless in its effects," proves nothing but his unwillingness to figure in Mr. Morton's advertisements, and his prudence in refusing to make himself responsible for anything and everything Morton might, in his ignorance, do with an agent liable to the most dangerous abuse.

CHAPTER V.—THE PATENT.

Our proposition is, that Dr. Jackson's exclusive right to the honor of the discovery of the application of sulphuric ether, for the prevention of pain, is not invalidated by the connection of his own name with that of Mr. Morton in the patent.

It is well known that a patent was taken out in the joint name of Dr. Jackson and Mr. Morton, and that by the language of that instrument they were represented as joint discoverers. It is now contended, in behalf of Mr. Morton, that he is not estopped by that fact from maintaining the ground that he was the sole discoverer of etherization; that in permitting the name of Dr. Jackson to be associated with his own in the patent he was governed by the opinion of counsel, who now alleges that his advice was given under a misapprehension of the merits of the case. The assertion is, however, made, that Dr. Jackson is estopped from claiming the whole discovery, by the alleged fact, "that he knew that Morton had applied for an

exclusive patent," that "he made no objection," and that "he was satisfied with making a professional charge for advice." The testimony to this effect comes mainly from two witnesses, Mr. Morton himself, and R. H. Eddy, Esq. To the statement which is made in the "memoir" of Mr. Morton, to the French Academy, relative to the taking out of the patent, we do not attach any credit whatsoever. It is contradicted by the most conclusive evidence, to wit, his own voluntary admissions. If the narrative which he gave to Dr. D. P. Wilson of his connection with the patent, sworn to by that witness, be true, then are the allegations in his memoir false. Dr. Wilson, let it be borne in mind, was an assistant in the office of Mr. Morton; he was engaged in the surgical department of dentistry; he administered the ether, from which responsibility Mr. Morton always shrank; and he had the entire confidence of his employer. Dr. Wilson testifies, that, being surprised at the phraseology of the patent, he sought from Mr. Morton an explanation of his connection with it. In reply Mr. Morton stated as follows: "That as he was the first person who had applied the ether, he supposed that he had a right to take out a patent in his own name, and for this end consulted R. H. Eddy, Esq., who so advised him, but suggested that Dr. Jackson should be made a party to the instrument, inasmuch as Dr. Jackson had suggested to him the new application of the ether; that Dr. Jackson was opposed to any patent whatever, but that he at length yielded to the solicitations of himself and Mr. Eddy, that a patent should be taken out, recognizing Dr. Jackson as the discoverer of the new agent, and himself as its proprietor; and that Mr. Eddy said that he (Morton) had a right to take out a patent in his own name, and as he was determined to do so, this was the only way by which Dr. Jackson could secure or save to himself the credit of his discovery."

This was a responsible statement, made by Mr. Morton on the eleventh day of November, in the year 1846. He told the truth then; he did not then claim the discovery as his own; "he was its proprietor," and to Dr. Jackson belonged the whole credit of the "new idea." Eight months after, in the excitement of a controversy, he declares that "Dr. Jackson did not oppose his taking out an exclusive patent;" that Dr. Jackson thought he would do well with it, and only intended "to make him a professional charge for advice;" leaving it to be inferred that Dr. Jackson had no immediate connection with the discovery, but awarded it to him.

The friends and advocates of Mr. Morton have been compelled to admit that he sometimes practised duplicity, in confessing that Dr. Jackson had communicated the discovery to him, and that his right under the patent was merely the right of a purchaser; but this duplicity they would now turn to his advantage by saying that his object in so doing was to avail himself of the scientific reputation of Dr. Jackson, and to secure to the discovery

the authority of his name. But in Mr. Morton's narrative to Dr. Wilson there was no deception; it was a deliberate confession to a friend and an assistant, and he is bound by it; the statement in his memoir comes "too late."

The testimony of Dr. Payne is in point. He has been using the ether in the city of Troy; an injunction is served upon him by one of Mr. Morton's agents, and he thereupon comes to Boston to see the proprietor of the discovery, and to satisfy himself in relation to the validity of the patent, which he has infringed. He seeks an interview with Mr. Morton, and asks, why it is that his name appears in the patent, if Dr. Jackson was the sole discoverer of the new application of ether. Dr. Payne has tried the new agent; he is perfectly satisfied of its safety; he does not care whether Dr. Jackson or Mr. Morton be its discoverer; there is no object in deceiving him; neither the assurances of Dr. Jackson, nor the authority of his name, will add ought to his confidence in the discovery; he merely seeks information about the patent. Dr. Payne testifies, "that he questioned Mr. Morton about the patent, how he came to have any interest in it, &c." Mr. Morton replied, "that he had been very fortunate in effecting an arrangement with Dr. Jackson, before any one else had the opportunity; that he had purchased of Dr. Jackson, who, himself, objected to any patent, all his right and interest in the profits which might result from the discovery; and that his interest in the patent was a purchased one alone." Dr. Payne also states, that Morton only spoke of himself "as the fortunate person, who, by consequence of first receiving the idea of etherization from another, had been enabled to secure to himself great pecuniary benefit." This statement was made by Mr. Morton early in the month of January, 1847. It cannot be reconciled with the language of his memoir.

The testimony of Dr. Robinson, of Salem, is to the same effect. After alluding to his interview with Mr. Morton, he says, "I was convinced, from Mr. Morton's statements and admissions, that his own interest in the discovery was exclusively a pecuniary interest. He did not seem to consider himself in any sense connected with the originating of the discovery, but appeared to think of nothing but his pecuniary right." Refer, also, to the conversation quoted in Mr. Blaisdell's deposition. Mr. Morton tells him "that he is about to take out a patent upon the new application of ether," and Mr. Blaisdell asks how he could do so, since Dr. Jackson, by his own admission, was its discoverer. In reply, Mr. Morton states that he had purchased of Dr. Jackson his right to the profits of the discovery, and that Dr. Jackson had assigned his whole interest to him, for, said he, "*Dr. Jackson will have nothing to do with any patent.*" This interview occurred immediately after the discovery had been intrusted to Mr. Morton. Will the friends of Mr. Morton presume to say that he was deceiving Blaisdell, from considerations of mere expediency? Not long afterwards, Mr. Blaisdell was employed by Mr. Morton to act as his agent

for the sale of licenses under the patent, and he says that he uniformly, in accordance with the instructions of Mr. Morton, informed purchasers that Dr. Jackson was the discoverer of the new agent, and that he (Morton) was its proprietor. Were these directions given to his agents in order that they might thereby inspire confidence in the discovery? Had Mr. Morton so little confidence in himself and "his discovery" that the name and authority of Dr. Jackson were necessary to give it credit? We do not believe that his biography will afford another instance of so great modesty, and distrust of his own merit.

We next invite attention to the letter of R. H. Eddy, Esq., to the surgeons of the Mass. General Hospital. That document is important, not so much as a statement of facts as of opinions. To many of the facts stated we yield a willing assent, but to the inferences, and conclusions of Mr. Eddy we shall not pay so much respect. With the alleged reasons which induced him to regard etherization as the joint discovery of Dr. Jackson and Mr. Morton, we shall have nothing to do; we do not propose to answer the question—"What constitutes a discovery?" To the general tone of the deposition we do object. Mr. Eddy, "has learned that Dr. Jackson utterly refused to submit his claims to a just arbitration;" he "had understood from Dr. Jackson that he had some connection with Dr. Morton in making the discovery;" he "is fully convinced that Dr. Jackson thought the whole matter of little value or importance, and was willing that Morton should do what he pleased with it, so long as he did not couple his (Dr. Jackson's) name with it;" "after he had prepared the specification for a patent, Dr. Jackson fully approved of it;" "it is a matter of indifference to him to whom the world may ultimately award the honor of being its benefactor for having given to it the great discovery in question," &c. We say, therefore, that the general character of the deposition is partial; that it betrays a want of fairness, and a judgment biased by interest. Mr. Eddy's opinions, if relied upon, would force the following conclusions: first, that Dr. Jackson shrank from submitting his claims to the arbitrement of a suitable umpire; second, that he did not regard himself as the exclusive discoverer of etherization; third, that he had but little confidence in the discovery, and was willing that it should be patented by Mr. Morton; fourth, that Dr. Jackson was glad to receive ten per cent. on all sales of licenses under the patent, as an equivalent for the part which he had in the discovery.

It is needless to add, that conclusions like these would do great injustice to Dr. Jackson. We propose to account for this manifest bias on the part of Mr. Eddy in favor of the pretensions of Mr. Morton. Our argument is a legitimate one, and supported by high authority. We say that a party who is interested in a matter in question is not competent to prove it. The facts which he states are liable to be colored, and the inferences which he draws are not the result of impartial in-

vestigation; feeling usurps the place of judgment, and the party is thereby really, though perhaps unconsciously, misled.

Now Mr. Eddy will not deny that he had an interest in Mr. Morton's patent; he will not deny that he expected to realize a large profit from the discovery in Europe; indeed, it is admitted, in the argument of Mr. Dana, that he was interested to the amount of fifty per cent. in the European rights, and when they were applied for both Mr. Morton and himself believed that they would be productive of great pecuniary emolument. The testimony of Hunt, Wilson, and Hemmenway, may be referred to on this point. It is apparent, therefore, that Mr. Eddy must have testified under a strong bias; that his evidence has not the merit of entire impartiality: and that he must have leaned in favor of that party to whom his interest inclined him.

But, says Mr. Eddy, at the close of his letter, "I have endeavored to state a few facts relative to the early discovery of the effect of sulphuric ether in surgical operations. In doing so, I am influenced by no other motives than to render justice to whom it may be due. It is a matter of indifference to me to whom the world may ultimately award the merit of being its benefactor for having given to it the great discovery in question." It would have been the part of wisdom in Mr. Eddy to have omitted that paragraph. We submit, upon the evidence already published by Mr. Morton, that it was not a "matter of indifference" to Mr. Eddy to whom belonged the honor of the discovery. If, in the month of June, 1847, the date of the letter referred to, the English government had, as was anticipated, made a large donation to the discoverer of etherization, would it then have been a "matter of indifference" to Mr. Eddy who was its discoverer?

There is another inconsistency in his testimony. Mr. Eddy states that "*he found Dr. Jackson tinctured with old and exploded prejudices against patents, which he labored to remove;*" but he afterwards goes on to say, that "Dr. Jackson's disinclination to associate with Mr. Morton in a patent arose from no disposition, ever evinced to me, to give the public a gratuitous use of the discovery." If Dr. Jackson was thus, in principle, opposed to patenting any new medical agent, if his prejudice against patents was so active and confirmed, if Mr. Eddy labored to remove it, it is very marvellous that Dr. Jackson should never have "evinced to him any disposition to give the public a gratuitous use of the discovery."

The allegation that the chief objection with Dr. Jackson to taking out a patent upon his discovery arose from what he supposed would be the action of the Massachusetts Medical Society, and also the statement that Dr. Jackson regarded the discovery of little value, are completely answered by the testimony of many witnesses. It is remarkable that Dr. Jackson should have expressed, to medical gentlemen, entire confidence in his discovery, and asserted that even capital cases in surgery

might be performed upon patients who had inhaled the vapor of pure sulphuric ether, with complete insensibility to pain, but, on the other hand, that he should have given Mr. Eddy reason to infer that "he thought the whole matter of little value or importance."

Without further comment upon the communication of Mr. Eddy, we submit the following facts relative to Dr. Jackson's connection with the patent. They are taken from the pamphlet published by Dr. Gay, and from certified documents in the possession of the editors; and it will be observed that this account of the patent is fully supported by the admissions, and positive and unsolicited declarations, of Mr. Morton, as sworn to by various witnesses.

A few days after Dr. Jackson had communicated his discovery of the effect of the inhalation of sulphuric ether to Mr. Morton, that gentleman applied to Mr. R. H. Eddy, who was a solicitor of patents, to secure one for himself. Mr. Eddy advised Mr. Morton, that, as he had made the first application of the discovery, he was entitled to the protection of the patent law, and that he could take out a patent in his own name.

Upon being informed of this movement on the part of Mr. Morton, and of the opinion which the solicitor had given in relation to the matter, Dr. Jackson called upon Mr. Eddy, and asked him why he had so advised Mr. Morton. Mr. Eddy then endeavored to explain to him, that, as Morton had performed the first operation on a patient who had inhaled the ether, he had a right to take out a patent in consideration of that application; but he urged Dr. Jackson, at the same time, to unite with Mr. Morton in applying for a patent, whereby his own right to the discovery might be recognized in the petition to be filed at the patent office. Dr. Jackson replied that *he was opposed to patents*, and that he did not deem it consistent with the principles of a liberal science to monopolize any discovery. He further objected, as an additional argument against taking out a patent upon the discovery, that it would be contrary to the spirit of the rules of the Mass. Medical Society. Dr. Jackson was then told that he would "lose his discovery;" that Morton would patent it, and would swear that "he believed it to be his own," and thus procure a kind of recognition at the patent office that he was the discoverer. Dr. Jackson was given distinctly to understand, that, in order to save to himself the honor of his discovery, his name must appear in the patent, and that otherwise the public would attribute it entirely to Mr. Morton. He was also informed that if he should take out a patent in conjunction with Mr. Morton, he might assign to him (Morton) his whole interest in the instrument, and thereby avoid a copartnership in the resulting profits.

Upon these assurances of the solicitor, in whose friendship and professional capacity he then had implicit confidence, and for the single purpose of securing the credit of his discovery, Dr. Jackson

finally consented to the proposition of Mr. Eddy, and the patent was directed to him.

"There is no doubt whatever in the minds of Dr. Jackson's friends," concludes Dr. Gay, "that he consented to it for the sake of preventing Mr. Morton from holding a legal instrument in his possession, with his own name alone in it as the discoverer. Dr. Jackson was surprised, upon reading the petition presented for his signature, that Mr. Morton was fully recognized in it as a joint discoverer with himself, but he had agreed to the arrangement, and he supposed that the expression referred to was a necessary part of the technical wording of that paper. If, for the subordinate part performed by Mr. Morton, the patent laws were such as to permit him to join with Dr. Jackson in taking out a patent, the wording of the instrument referred to could not have been different. The patent has always been the exclusive property of Mr. Morton; he gave to Dr. Jackson a bond promising him a certain percentage of the profits that he might derive from it. Dr. Jackson has received no pecuniary advantage from this patent, and he has determined that he never will receive any. He has destroyed the bond."

The charge made by Mr. Dana, "that Dr. Jackson not only made no objection to Dr. Morton's being joined in the application, (for a patent,) but was glad to be included in it himself, even at the lowest rate of compensation," is not supported by Mr. Morton's own testimony; it is emphatically contradicted by the statement of Mr. Eddy, that Dr. Jackson expressed great unwillingness that his name should be associated with Mr. Morton's in any patent.

Again; Mr. Dana most unjustly asserts, in a preceding sentence, that "the idea of a right in the patent came only (to Dr. Jackson) from the partiality and legal caution of his friend Mr. Eddy;" and again, relying upon some minutes with which Mr. Eddy has furnished him, he labors to force the conviction that Dr. Jackson manifested a feverish desire to secure a liberal share of the profit to be realized upon the European patents. The whole argument relative to this matter is unwarranted by the evidence, and is in the highest degree disingenuous.

Dr. Jackson's motives for insisting upon a percentage of the proceeds of all sales of rights to use the ether, both in Europe and in this country, were the same. His first object was to defeat the taking out of any patent whatever, and when advised that this was impossible, he was unwilling that those parties, who were intent upon making his discovery a means of profitable speculation, should reap the whole benefit. That he did not wish to make anything out of the public is sufficiently proved by the fact that he immediately surrendered his share of the proceeds to the public. It is proper in this connection to state, that Dr. Jackson was, in the month of November, 1846, notified by Mr. Eddy that he had in his possession, for him, (Dr. Jackson,) a considerable

sum of money, which had been realized from the sale of patent rights, and that Dr. Jackson indignantly refused to accept it. He never taxed the public for his discovery, and has never received a dollar for the use of ether.

CHAPTER VI.

INTRODUCTION OF THE DISCOVERY OF ETHERIZATION TO THE MASS. GENERAL HOSPITAL.

It is asserted that "so long as the discovery was under test, and its result was uncertain, Dr. Jackson was unseen and unheard," and that he did not act intimating that he had any connection with the discovery, until its value had been fully shown by two experiments at the Hospital. These allegations are disproved by abundant testimony.

There is no doubt, upon the evidence presented, that the Massachusetts Hospital was really indebted to Dr. Jackson, not only for the discovery of etherization, but for the privilege of first testing it in a capital operation, and for the right to use it freely, at a time when its general use was restricted by a patent. The testimony of Mr. Barnes is conclusive upon this point. That witness states that on the afternoon of the 30th of September, or of the following day, Mr. Morton called at the laboratory of Dr. Jackson, to announce the success of his first experiment. He stated "that he had tried it (the ether) upon a patient with complete success, for while he extracted a tooth the patient was insensible and knew nothing about it. Mr. Morton intended soon to perform another extraction. Dr. Jackson then said to him, 'You must go to Dr. Warren, and obtain his permission to administer it at the Massachusetts General Hospital, and if possible it should be in a capital operation; for people will not believe in the insensibility to pain in case of a mere tooth, since it is very common for patients, in an ordinary case, to say that it did not hurt them, when the twitch is very sudden and the operation skilfully performed; this proof would not be regarded by the public as satisfactory.' After some argument, and Dr. Jackson's further insisting upon it, Morton promised to go to the Hospital."

Mr. Barnes also testifies, "that some time after this, when the experiments at the Hospital had proved successful, and while the patent was being negotiated, the right of using the ether having been assigned to Morton, Dr. Jackson urged him, in my presence, to present the free use of it to the Hospital, saying that they would not buy a patented article, and it ought to be given to the poor. Morton was very reluctant to do this, and asked if there were not some pay patients at the Hospital, who could afford to remunerate him for administering the ether. This was argued a long time, and Morton finally said that he would do so." We think that this positive testimony completely disproves the assertion of Mr. Morton, that he agreed with Hayden, prior to this visit to Dr. Jackson's laboratory, that it was best to announce the discovery to the surgeons of the Hospital. The reader is already satisfied how much credence is due to the statements of those gentlemen.

It appears, therefore, that Dr. Jackson sent Mr. Morton, as his messenger, to ask permission of Dr. Warren to test the ether in a surgical operation at the Hospital, and that Morton was an unfaithful messenger, and did not mention the name of the physician who sent him, and that he managed to have the operation done without letting Dr. Jackson know when it was to be performed, so that he did not witness the first operation; a fact which has been dwelt upon by his opponents with great emphasis. After obtaining permission from Dr. Warren to apply the ether at the Hospital, Mr. Morton returned to Dr. Jackson's, and informed him of the fact, but did not tell him when the operation was to be performed, and he never knew of it until after it was done. This was the 16th of October. Soon afterwards, Dr. Jackson went to the copper mines of Maryland, but upon his return to Boston he attended the first operation of which he received notice, neglecting important engagements to do so. We submit, therefore, that the assertion, that "no experiment was tried, to Dr. Jackson's knowledge, or under his direction, although he thought the experiment on the tooth not satisfactory," is without foundation.

Some allusion has been made by Mr. Dana, and in the Report of the Trustees of the Hospital, to a conversation which took place between Dr. J. C. Warren and Dr. Jackson, later in this month, in regard to his (Dr. Jackson's) connection with the discovery, and also to the request which Dr. Warren extended to him to administer the ether during a capital operation which was to be performed on Saturday, the 31st day of October. The facts are as follows: On or about the 29th day of Oct., Dr. Warren was a second time informed by Dr. Jackson, at his (Dr. W's) house, that he was the exclusive discoverer of etherization, and that he had first communicated it to Mr. Morton. Dr. Warren again expressed his delight that the discovery had been made by a scientific man, and then made the request referred to, and upon the following day sent a note to Dr. Jackson containing the same invitation. Dr. Jackson declined accepting the invitation, for two reasons; one, that he was going out of town, and the second, that he could not do so consistently with his arrangements with Mr. Morton. Dr. Jackson was absent in Maryland when this operation was performed, and the arrangements with Mr. Morton, spoken of, relate to the patent which had already been applied for, and Dr. Jackson had assigned his whole interest in that instrument to Mr. Morton. So scrupulous was Dr. Jackson to observe the spirit of that assignment, that a very few days before, when sending his own sister to Dr. Keep to have some teeth extracted under the influence of ether, he had requested Dr. Keep to ask Morton's consent to the application of the agent.

This magnanimity on the part of Dr. Jackson should be contrasted with the mean and selfish spirit evinced by Mr. Morton in neglecting to notify Dr. Jackson of the first experiments which were performed at the Hospital. Dr. Jackson

manifested no feverish impatience to proclaim his discovery to the world, and to demand its gratitude; he was not ambitious for glory, and asked no reward; and he did not publicly claim the discovery as his own until it was in danger of being appropriated by another.

The editors are assured that Dr. Jackson felt great interest in the operation referred to, and he had entire confidence in its complete success. He mentioned it, during his absence, to Dr. Gale of the patent office, to Dr. Hare of Philadelphia, and Mr. Tyson of Baltimore; and he informed those gentlemen, and others, that they would soon read a notice of the first painless capital operation in surgery. The editors have also in their possession another letter from Dr. Warren to Dr. Jackson, desiring him to give some practical account of the new agent for producing insensibility to pain, and to procure for the Hospital the right to use the same, and the apparatus for its inhalation. The testimony of Barnes also proves that Dr. Jackson, so soon as it could be effected, induced Mr. Morton to surrender the right of the free use of ether, &c., to the Hospital. This arrangement was wholly the work of Dr. Jackson, and it was only by dint of arguments addressed to Morton's pecuniary interest that he finally prevailed upon him to accede to it. Mr. Morton was unwilling to make a free gift of his patent right, and he never would have done so, had it not been suggested to him that it was good policy to interest the surgeons of the hospital in the discovery, and that it would remove objections to the patent if it was made free to the poor. In justice to Dr. Jackson, we would add, that he did not resort to this last appeal until forced to do so by Morton's selfish maneuvering. Even then Mr. Morton was unwilling to grant an unrestricted right, but signified his wish to tax those patients who were able to pay for the benefit of the discovery. Thus was the hospital really indebted to Dr. Jackson for the free right to use the ether.

Had application been made to Dr. Jackson, by the surgeons of the Hospital, before he had transferred his pecuniary interest in the discovery to Mr. Morton, we are assured that he would most cheerfully have reserved to that institution the free use of the discovery. He did the best that he could do, after the transfer had been made, inducing Mr. Morton to surrender that right, and it is to Dr. Jackson that the thanks of the trustees of the Hospital should have been presented.

It is claimed, however, by the report of the trustees, that credit is due to Mr. Morton for tendering the free use of ether to similar institutions throughout the country. This meritorious act was unfortunately not done, if done at all, until after the patent had ceased to be a source of profit. The allegation that an unrestricted right was tendered to the army and navy of the United States is not sustained by fact. On the other hand, it is known that Mr. Edward Warren went to Washington in behalf of Mr. Morton, and endeavored to

procure an appropriation of twenty thousand dollars from Congress for the purchase of this right. The petition presented by Mr. Morton is described "*as offering to the government, for the use of the army and navy, the purchase of his process for preventing pain in surgical operations.*" It was referred to a special committee in the senate, of which Mr. Sturgeon, of Pennsylvania, was chairman. That committee, however, never met, nor was any action had upon the subject.

Upon the occasion of this movement on the part of Mr. Morton, Dr. Jackson expressed his deep mortification to the President of the United States that any patent had been taken out upon the discovery, and he was especially indignant that the discovery had not been freely given to the army and navy.

We submit, therefore, upon the evidence already adduced, and upon facts well known to this community, that Mr. Morton manifested a determination to monopolize the discovery. There is no doubt that he intended to make the dentists of Boston tributary to him, that he at first refused to sell any rights in the city, and that he considered himself "sufficient for the dentistry of Boston." Mr. Morton also sent his agents to all parts of the country to dispose of licenses under his patent, and it is known that in many instances, in this vicinity, legal process was commenced against purchasers, who had given notes for the amount to be paid by them for the use of the ether, even after the patent had been in fact abandoned.

Dr. Jackson always denounced this monopoly; he asserted that the patent was an improper one, and that he lamented the connection of his name with it, for the discovery was not a joint discovery. Dr. Jackson's protest against the patent was everywhere read, and through his instrumentality alone the use of ether was made free to "suffering humanity."

CHAPTER VII.

It is proper to notice *Dr. Horace Wells'* claims to the discovery in controversy. This dentist, following out the suggestion of Sir Humphrey Davy, that nitrous oxide might probably be used with advantage, as an anesthetic agent in such surgical operations as were attended with no great effusion of blood, extracted teeth from several patients, in the autumn of 1844, under the influence of this gas, without their experiencing any pain. Dr. Wells abandoned the use of nitrous oxide, however, in December of the same year, and there is no pretence that he, or any person in his behalf, or in consequence of his experiments, subsequently used this gas as an anesthetic agent—a fact of itself sufficient to show that, notwithstanding his success in a few instances, there must have been decisive objections to the continuance of its use. This conclusion is amply confirmed, by a statement published to the world a long time ago, and republished by Mr. Dana in his pamphlet, and which, moreover, is not denied by a champion of Dr.

Wells' claims, in a communication in the Boston Medical Journal for May, to wit, that Hon. James Dixon, member of Congress from Connecticut, having applied to Dr. Wells to administer this gas to him, in a case of severe toothache, Dr. Wells informed him, that having met with only partial success, he had abandoned the use of it, and advised him not to take it.

As to sulphuric ether, Dr. Marcy recommended its use to Dr. Wells. An experiment was performed, by whom it is not stated, upon a patient under its influence, at Dr. Marcy's office. It has not been said that the experiment was successful. The inference is that it was not. Dr. Wells, in his pamphlet, states that Dr. Marcy advised him, after this experiment, to continue to use nitrous oxide in preference to sulphuric ether, *which advice he followed.*

On such facts as these, and they are derived from Dr. Wells' own pamphlet, it is preposterous to set up any claims, in his behalf, to the authorship of the ether discovery.

It is claimed for Dr. Wells that he imparted to Dr. Jackson the idea of using sulphuric ether in surgery. He must have imparted the idea, if at all, after sulphuric ether had been recommended to him by Dr. Marcy, and after, in consequence of Dr. Marcy's advice, he had *wholly abandoned the use of it.*

Now, it is not probable that Dr. Wells would have thought of imparting an idea to Dr. Jackson, which, as we have seen, he had entirely repudiated in his own mind. And even if, having repudiated, he had still communicated it to Dr. Jackson, would he have been deserving of any credit, if Dr. Jackson, subsequently, and in consequence of his suggestion, discovered that sulphuric ether *was* available as an anæsthetic agent. The fact is, however, that Dr. Wells never said anything whatever to Dr. Jackson, or to any one in his presence, in relation to the use of sulphuric or any other ether vapor, as applicable to prevent pain in surgical operations, and even if it were otherwise, it is proved that Dr. Jackson had long before imparted the very same idea which it is claimed that Mr. Wells imparted to him, to Mr. Bemis and Mr. Blake. (See their affidavits.) A Dr. Hickman, as it appears from the London Lancet, published a pamphlet in 1824, in which he describes surgical operations rendered painless to his patients, by the inhalation of carbonic acid gas.

Whatever credit may be due to Mr. Wells for his meritorious exertions to demonstrate the supposed applicability of nitrous oxide, in surgical operations, his experiments with that gas produced no result, of permanent value, except to prove its general unavailability as an anæsthetic agent, and they have had no more connection with the discovery of etherization, than have those performed by Dr. Hickman with carbonic acid gas.

As to nitrous oxide, Dr. Jackson has had no controversy with Dr. Wells, and he has never believed that it could be made generally useful in surgery.

CHAPTER VIII.

It is claimed that not only does the glory of the discovery, itself, belong to Mr. Morton, but that to him alone is to be paid the honor of spreading its blessings through the world. We simply admit that Mr. Morton was, sooner or later, the bearer of the discovery wherever a loaf or a fish, the lure of a price or a reward, enticed him. He claims to have tendered, through Congress, its free use to the army and navy of the United States. The editors are in possession of documentary evidence, furnished to them by members of Congress, showing the tender to these departments of government, not of its *free use*, but "*of its purchase*," as he had already tendered it to the Massachusetts General Hospital. Mr. Morton, with most disinterested alacrity, made it, according to Mr. Bowditch, "*free as God's own sunshine*," wherever, and provided always, there was the reciprocal gift of a good and valuable consideration. He was willing that the surgeons and dentists of the country should prevent, he cared not how much of human pain, if they gave him their ready money and their "*notes to balance*," for that which he had no right to sell at all. The editors are in possession of facts indicating that Mr. Morton would even have been willing that all the hospitals and armies and navies of the world should have paid him tribute, provided he could subsequently have enjoyed the sublime satisfaction of relieving their sufferings; and tributaries they might have been for many years to come, if Dr. Jackson had been prevailed upon to allow the patent to be taken out in his own name, as sole discoverer, and had then assigned it to Mr. Morton, who would thereupon have had a right to sell a discovery, which Dr. Jackson, as soon as he found that he was under no obligation to Mr. Morton and his co-partners, presented freely to the world.

But Mr. Morton did *not*, in point of fact, precede Dr. Jackson in the introduction of the discovery into general use. Nearly all the different countries of Europe received their first definite knowledge, if not their first actual intelligence, of it from Dr. Jackson; and it was through the influence of his distinguished scientific friends that its reputation was there established. Dr. Henry J. Bigelow's paper, the same which has been alluded to as published in the London Lancet, served but to mystify and conceal the true nature of the agent employed; and we know, from the highest authorities, that it was generally discredited until Dr. Jackson made his communication to the "*Académie des Sciences*" at Paris. Immediately after its introduction into Europe by Dr. Jackson and his scientific friends, he received works dedicated to him by medical writers in France and Italy, indicating to whom they considered their own countries indebted. The discovery was communicated by Dr. Jackson to Prussia. It was made public in Giessen on Christmas day. Dr. H. J. Bigelow had gone before, but had been received without notice, and had secured no place in the confidence of the

medical faculty of that city. Upon Dr. Jackson's authority alone was the discovery accredited, and put to trial.

A letter from Dr. Jackson contained the first intelligence of the discovery which reached the surgeons of Vienna; and they, relying upon his authority, and acting in obedience to his "precise and cautious directions," subjected it to an immediate test, upon the successful issue of which, a burst of applause rang through the operating room, and the name of Jackson was on the lips of every spectator, indicating from whom the discovery was there received. At St. Petersburg, and in Sweden, and in the United States, the same source is acknowledged. It was communicated by Dr. Jackson to the East Indies, in a long and carefully written letter of instructions to Dr. Parker, in the winter of 1846.

Upon the testimony herein written, the claims of Dr. Jackson, and the doings of Mr. Morton's defenders, are submitted to the world, to which, through Dr. Jackson, as its providential benefactor, the discovery now freely belongs. The world has not murmured, and it will not murmur, that Dr. Jackson did not sooner communicate to it a discovery already known to his own mind; or if, like the few envious maligners, who are always boding ill from their hollow oaks, it had murmured, its murmurs would long ere this have been forgotten in its deep and fervent gratitude.

TESTIMONY.

I, Don Pedro Wilson, of Boston, County of Suffolk, and Commonwealth of Massachusetts, on oath depose and say, that I was an assistant in the office of Dr. N. C. Keep, of this city, during the year next preceding the eleventh of November, A. D. 1846. While with Dr. Keep, I formed the acquaintance of Mr. W. T. G. Morton, and was in the habit of frequently visiting him, at his office, in Tremont Row.

After the discovery, by Dr. Charles T. Jackson, of this city, of the application of ether to produce insensibility to pain during operations of a surgical nature, I had several conversations with Mr. Morton in relation to the circumstances under which Dr. Jackson had communicated the discovery to him, and the nature and extent of the interest which he had acquired therein, by virtue of his purchase, from its author, of the pecuniary benefit which should result therefrom.

Respecting the authorship of the discovery, I do not feel the least embarrassment or doubt, for my opinion has been wholly founded upon the narrative and declarations of Mr. Morton, in which, uniformly, and without reserve, he ascribed its authorship to Dr. Jackson, never speaking of himself otherwise than as the first and fortunate person to whom Dr. Jackson had communicated it.

I here speak of the time which intervened between the eleventh day of November, A. D. 1846, or thereabouts, and the month of February then next ensuing, when Morton first claimed the discovery to be his own.

On the aforesaid eleventh day of November, I concluded a contract with Mr. Morton to become an assistant in his office. During this month I had conversations with Morton, in which he expressly

stated that "he was indebted to Dr. Jackson for the idea of the new application of ether, and had received instructions from him how to apply it."

Immediately upon Morton's receiving his patent from Washington, which was within a few days of the time of my entering the office, being surprised at the phraseology of the patent, which, being taken out in the name of both Dr. Jackson and Mr. Morton, declared them to be joint discoverers, I asked Morton for an explanation. He related to me, in substance, the following facts respecting the circumstances under which the discovery had been communicated to him: "That a lady, upon one occasion, called at the office to procure a set of artificial teeth; that it became necessary to extract several stumps; that the lady was timid and sensitive, and shrunk from the operation; that in order to prevail upon her to submit to the instrument, he determined, in some way, to act upon her imagination, and for this purpose went to the laboratory of Dr. Jackson to procure an India rubber bag, which he proposed to inflate with atmospheric air, and then persuade the patient to inhale from it, stating to her, at the same time, that she would experience no pain from the operation; that Dr. Jackson scouted the idea of practising any such deception, directing him to apply the vapor of pure sulphuric ether with a handkerchief or folded cloth, which would render the patient perfectly insensible, when he could extract her teeth without her knowing it; that he instantly seized upon the new idea, and immediately commenced his first experiments with the ether."

This narrative, received from Morton's own lips, was confirmed by statements and expressions made by him, and by the assistants and others connected with the office, from day to day.

Morton stated, "that as he was the first who had applied the ether, he supposed that he had a right to take out a patent in his own name, and for this end consulted R. H. Eddy, Esq., of this city, who so advised him, but suggested that Dr. Jackson should be made a party to the instrument, inasmuch as Dr. Jackson had suggested to him the new application of the ether." Morton also stated, "that Dr. Jackson was strongly opposed to any patent whatever, but that he at length yielded to the solicitations of himself and Eddy, that a patent should be taken out, recognizing Dr. Jackson as the discoverer of the new agent, and Morton as its proprietor; and that Eddy said, that although he (Morton) had a right to take out a patent in his own name, and had determined to do so, this was the only way in which Dr. Jackson could secure, or save to himself, the credit of his discovery."

I was in the office of Mr. Morton until April, A. D. 1847, and had charge of the surgical department of dentistry; but nothing occurred to change, or in the least degree modify, the belief which I had previously entertained in relation to the discovery of etherization. On the contrary, Morton's directions and instructions to the assistants in the office, and to the agents whom he sent abroad to sell rights under his patent—the manner and frequency with which the name of Dr. Jackson was associated with the origin of the "new idea," and the advice and authority of Dr. Jackson with our experiments in the office—only strengthened my former belief. During the early application of the ether, Dr. Jackson was constantly spoken of in the office, and without contradiction from Morton, as the sole discoverer of etherization, notwithstanding our knowledge of the language of the patent, which

declared Dr. Jackson and Mr. Morton to be its joint discoverers. It was an every-day remark in the office, with assistants and students.

In my administration of the ether, I was guided by, and relied solely upon, the advice and assurances of Dr. Jackson, received through Morton.

We never dared to follow Morton's own directions. If we had followed even the few which he volunteered upon his own responsibility, and not confined ourselves strictly within the directions and authority of Dr. Jackson, received as aforesaid, and the teachings of our own observations and experiments, I have no doubt that dangerous and even fatal results would have ensued, and etherization, at that time, have resulted in a failure.

Morton, evidently, was afraid of the effects of the ether upon himself. He never gave me any reason to suspect that he ever inhaled it. I never knew him to apply it to a patient in the office. This was from a most apparent fear, and shunning of responsibility. I was in and out of Morton's office quite frequently during the summer, and the month of September, of 1846. I never saw sulphuric ether there; never heard Morton speak of it, that I can remember; never perceived its odor about the person of Morton, or otherwise. I think it could not have been used in the office without my having perceived its odor.

There was a small vial in the office containing chloric ether, which Morton stated to me he used to deaden the nerves of teeth—an article common among dentists for this purpose.

During the summer of 1846, I often heard Morton speak of a new discovery, which he was about to publish to the world, to which he was giving his whole energies; and which, to use his own words, "would revolutionize the whole practice of dentistry, and secure to him a fortune;" but he never hesitated to tell me and others that "it consisted in a new preparation for filling teeth, and a new mode of making teeth and setting them to plate." This was Morton's great hobby, during the summer of 1846, and during the month of September of the same year.

In the month of February, 1847, Morton, for the first time, pretended that the new discovery was his own, and that he had made the application of ether as an agent for producing insensibility to pain, a subject of study or experiment previous to the 30th of September, 1846. Soon after the setting up of this pretension by Morton, the affidavits of William P. Leavitt, Thomas R. Spear, Jr., and Grenville G. Hayden, were taken by an attorney of this city; I being sent from the room while these witnesses were examined together and their testimony drawn up. It was about this time also that Mr. Edward Warren became associated with Mr. Morton. As soon as the affidavits of Leavitt, Spear, and Hayden were taken, they, all at once, and for the first time, began to talk about Morton's experiments with the vapor of ether previous to the 30th of September, aforesaid; and I, for the first time, heard that Morton's earliest experiment had been performed upon a water-spaniel in the summer of 1846, and that there had been a demijohn of sulphuric ether in the office in the month of August of that year, and that Leavitt and Spear had, in that month, inhaled the vapor.

This language of the deponents aforesaid thus became, all at once, directly contradictory to all of their former assertions.

About the same time Morton undertook to explain his narrative and statements hereinbefore de-

posed to by me, by stating that his object in visiting Dr. Jackson's laboratory, as aforesaid, was to deceive him, and gather some information which would enable him to perfect the great discovery to which he had been wholly devoting himself during the summer.

The first time of Spear's inhaling the ether, to my knowledge, was near the middle of November, 1846, when he suddenly commenced inhaling it, and was, after that time, in the habit of inhaling it continually. I never knew of Leavitt's having taken the ether in any instance; and I feel very confident that I heard him state, sometime in the fall of 1846, that he had never inhaled it.

Mr. Edward Warren, the author of a pamphlet supporting Morton's claims to the discovery, was directly interested in Morton's patent. There was a contract in writing between them, by the terms of which it was provided that Warren should receive ten per cent. of the proceeds of all sales under the patent. The original contract I copied myself, at Morton's request, at a time when a large sum of money was expected to be realized from the patent.

I have heard Morton state that Eddy would not take one hundred thousand dollars for his (Eddy's) interest in the matter.

DON P. WILSON.

SUFFOLK, SS. May 2d, 1848, Boston.—Sworn to before me

F. K. BARTLETT,
Justice of the Peace.

I, Horace J. Payne, of the City of Troy, County of Rensselaer, and State of New York, surgeon-dentist, depose and say, that in the early part of December, in the year eighteen hundred and forty-six, I commenced applying the vapor of ether for the purpose of producing insensibility to pain during operations of a surgical nature. This was after I had heard of the discovery of the preparation by Dr. Charles T. Jackson, of the city of Boston. About this time Dr. Clark, of Lansingburg, of the aforesaid county of Rensselaer, called at my office in Troy, and desired me to inform him of the nature of the agent I was then applying, and also to grant or sell to him the right to use it. After some further conversation, he left my office, proposing to meet me again in relation to the subject the same evening. He did not call as appointed. I soon after heard of him in the city of Boston, where he had gone, as I supposed, to consult with the patentees of the new discovery.

Dr. Clark purchased of Dr. W. T. G. Morton, as he afterwards informed me, a right under the patent for this and several of the adjoining counties, and immediately upon his return to Lansingburg served a notice upon me to abandon the application of ether for the purposes before mentioned. Soon after, Dr. Clark sold a right for the city of Troy to Dr. A. Bardwell, and I was notified by Dr. Blake, of Boston, who represented himself to be the agent of Dr. Morton, to abandon the use of ether in my practice.

I then attempted to negotiate with Dr. Bardwell for the privilege of employing the new agent conjointly with himself in the city of Troy. Failing, however, in this, I determined to go to Boston and inform myself fully in relation to the patent, and if satisfied of its validity, to purchase a right under the same for the state of Ohio.

I went accordingly to the city of Boston on the

second day of January following, and at once sought an interview with Dr. Morton. I had a protracted conversation with him respecting the use and effect of the vapor of ether, its discovery, and the patent which had been taken out thereupon. During this interview, Dr. Morton stated repeatedly and emphatically that Dr. Charles T. Jackson, of Boston, was the sole discoverer of the new agent for producing insensibility to pain, and that Dr. Jackson had communicated it to him. Furthermore, that all the knowledge which he possessed in relation to its properties and its application had come to him from Dr. Jackson, and that he never had any idea of applying sulphuric ether, or that sulphuric ether could be applied, for the aforesaid purposes, until Dr. Jackson had suggested it to him, and had given him full instructions. I then questioned Dr. Morton with regard to the patent, how he came to have any interest in it, &c. He replied that *he had been very fortunate in effecting an arrangement with Dr. Jackson before any one else had the opportunity, and that he was the first man to whom the discovery had been communicated by Dr. Jackson.* Dr. Morton also stated that he had purchased as his right and interest to the pecuniary profits which might result from the discovery of Dr. J., who himself objected to any patent, and, added he, "I have made a great bargain."

Dr. Morton then went on to say that if I felt any apprehension or embarrassment with regard to the patent, or if I desired any instruction as to the proper application of ether, he would call with me upon the discoverer, who would render any information I might wish. *Dr. Morton stated again and again that he was not in any way the discoverer of the new application of ether, but that the idea had been first communicated to him by Dr. Jackson, who was its discoverer, and that his (Dr. Morton's) interest in the patent was merely a purchased one, and, moreover, that he had been very lucky, in anticipating all other persons, by first receiving so precious a discovery from the lips of Dr. Jackson.*

From Dr. Morton's admissions and statements, so freely and emphatically made, no doubt was left on my mind that Dr. C. T. Jackson was the sole author of the discovery of etherization. I was very much astonished in learning some time after that the former asserted any claim whatever to the same. Dr. Morton only spoke of himself as the fortunate person, who, by consequence of first receiving the idea of etherization from another, was enabled to secure to himself great pecuniary benefit.

H. J. PAYNE.

STATE OF NEW YORK, RENSSELAER COUNTY, ss. Personally appeared before me this 12th day of April, A. D. 1848, Horace J. Payne, known to me to be the person who subscribed the foregoing statement in writing, and being by me duly sworn, depose that the facts therein stated are true.

JOSEPH WHITE,
Commissioner, &c., for the State of Massachusetts.

I, Allen Clark, of Honey Island, in the town of Gravesend, County of Kings, and State of New York, depose and say, that in the month of December, of the year eighteen hundred and forty-six, I was engaged in the practice of dentistry at Lansingburg, in the county of Rensselaer, and state aforesaid, that in the early part of that month, after hearing of the discovery of the application of the vapor of ether for the purpose of producing insensibility to pain during operations of a surgical nature,

I visited the city of Boston, with the intention of advising with the patentees of the discovery, and purchasing the right to use the same in my own practice.

Immediately upon my arrival in Boston I had an interview with Dr. W. T. G. Morton, and conversed freely with him in relation to the newly-discovered agent, its application, effects, and his privileges under the patent. This conversation was held in Dr. Morton's office, and there were several persons present at the time, and among them Dr. A. Blaisdell, who was acting as the agent of Dr. Morton for the sale of licenses under the patent.

I felt a great deal of doubt and hesitation both in regard to the safety and propriety of applying sulphuric ether for the purposes before mentioned, and also the validity of the patent, and was very particular and minute in my inquiries of Dr. Morton and Dr. Blaisdell.

After some negotiation, I purchased the sole right under the patent for the aforesaid county of Rensselaer, and several of the counties adjoining. During the whole interview, Dr. Morton never claimed to have discovered the new use of ether himself, but left a full and decided impression on my mind that Dr. Charles T. Jackson, of Boston, was its sole discoverer, and that he (Dr. Jackson) had first communicated it to him.

I never should have made the above purchase had I not believed, and been assured, that Dr. Jackson was its discoverer, and that he had pronounced its application to be perfectly safe. I never for an instant suspected, from the representations which were made by Dr. Morton at this interview, that he was in any way connected with the discovery of this new application of sulphuric ether, or that he ever would assert or pretend to any claim to its discovery, but was fully satisfied that Dr. Jackson was its author. I have since been greatly surprised that Dr. Morton should assume to have discovered etherization; since from his own declarations and the representations of his agents, I had drawn an entirely different conclusion. Dr. Morton left the impression on my mind that Dr. Jackson had first discovered the new agent, that he had thereupon communicated it to him, Dr. Morton, who had made the first application of it, and that his interest in the discovery was merely a pecuniary one.

ALLEN CLARK.

I, John E. Hunt, of Boston, County of Suffolk, and Commonwealth of Massachusetts, dentist, on oath depose and say, that I was an assistant dentist in the office of Dr. W. T. G. Morton, of this city, in the fall of 1846. I think I entered his office early in the month of November of that year. A few days afterwards I took up an inhaler which was lying upon the work-bench, containing a little ether, and breathed from it once or twice; I remarked to Dr. Morton how easily it worked, and asked him to try the instrument himself. He replied that "he would rather not." I inquired of Dr. Morton, if "he had ever inhaled the ether?" He answered "that he had not, *excepting only as he had inhaled it from the atmosphere about him.*" From which language, and the manner in which it was addressed to me, the conviction was inevitable that he had never inhaled its vapor, from a sponge, handkerchief, inhaler, or other instrument.

It was the "common report" of all in the office while I was connected with it, that Dr. Charles T. Jackson, of this city, had made known to Dr. Mor-

ton the new application of sulphuric ether, and given him instructions how to use it. Dr. Morton never denied this "common report;" never claimed the new discovery as his own; never, by a hint or expression, led me to infer that he in any sense considered it his own.

A few days after my becoming connected with Dr. Morton's office, in the fall of 1846, one evening, Thomas R. Spear, Jr., one of the boys in the office, asked William Leavitt, I being present at the time, to inhale the ether. Leavitt refused; whereupon, Spear said that "he would inhale it himself, if Leavitt would take the instrument from his mouth, when he had inhaled sufficiently." Spear sat down, and applied the inhaler to his lips; after a few inhalations, he sprung from his chair, seized a stranger who was present, by the waist, and nearly threw him over. Upon coming to, he apologized to the man whom he had handled so rudely, and asked him to excuse him, as "this was the first time he had ever taken the ether." I thought it barely possible Spear might have intended this simply as an apology for his rudeness. To satisfy myself, after the stranger had left, I asked Spear "if the ether had ever affected him in the same way before?" "No," he replied, "for I never took it before." Spear had much to say, at the time, of the delightful sensations which the ether had produced upon him. He spoke of them, as those who took the ether for the first time, and were pleasantly affected by it, used always to speak; satisfying my mind, beyond a doubt, that he had never experienced anything of the kind before.

A few days before the occurrence of what I have just stated, I was requested by Spear to accompany him on a walk to East Cambridge; where, as he told me, he was going to execute an order at the Glass House, for Dr. Morton. As we were crossing Cragie's bridge, I asked Spear "where Morton first got hold of the 'gas,'" (the ether went by that name in the office.) Spear then related, that "Dr. Morton had first obtained the idea at Dr. Jackson's laboratory, and from Dr. Jackson; that he (Morton) had been directed by Dr. J. to administer the ether to produce insensibility to pain; had tried it on a woman; that it worked first-rate; and that he had since then continued to use it under the directions of Dr. Jackson." I cannot be deceived that Spear intended to communicate distinctly to me that the new discovery belonged exclusively to Dr. Jackson; and that, at the time of this conversation, he so believed himself. I soon after repeated Spear's story, but not as coming from Spear, to Mr. Francis Whitman, the brother-in-law of Dr. Morton, and a student in the office. Mr. Whitman gave me to understand that I had *heard the truth*; said "he had heard the same account himself, and that there was no doubt of the truth of it in his own mind."

Dr. Jackson's directions and instructions were made the rule of all of our experiments in Dr. Morton's office. The directions which Dr. Morton sometimes gave us upon his own responsibility, and not as coming from Dr. Jackson, were generally injudicious and rash, and we did not think it safe to follow them.

About the middle of the month of November, (1846,) Dr. Morton stated to me expressly, that "he had never inhaled the ether." I was also connected with Dr. Morton's office in the winter of 1845-6, and in the spring and summer of 1846. I often heard Dr. Morton speak of a great work upon which he was engaged, which, in his own words, "would uptip and monopolize the whole practice

of dentistry in the city, and be worth one or two hundred dollars a day to him." This great work he unreservedly mentioned, as being a new "composition for filling teeth, and a new mode of manufacturing and setting them to plate." Morton stated to me, in the summer of 1846, that he had carried this "composition" to a chemist to be analyzed; that it had not yet realized his expectations, but that he should keep on trying to perfect it, until he succeeded; that he was sure to attain to perfection if money and time could effect it; that he had given one dentist of this city, whom I have since understood to be Dr. N. C. Keep, five hundred dollars for information upon the subject; and not being satisfied, had given to another a large sum of money, in order to gain all the information possible. During the summer of 1846 his energies seemed to be almost wholly bent in this direction. He was constantly exhibiting specimens of his manufacture to persons who called at the office.

I never, during the summer of 1846, saw sulphuric ether in Dr. Morton's office, and never perceived its odor there, about his person or otherwise; never heard its name mentioned by Dr. Morton, that I can remember, and never, during either the summer or fall of that year, heard him make a remark which would lead me to infer that he had made sulphuric ether a subject of observation, inquiry, study, or experiment, previous to the 30th of September of that year. And yet Dr. Morton was communicative and sanguine to an uncommon degree, in relation to whatever particularly interested or occupied his mind.

In the fall of 1846 I was in the office of Dr. Morton a few weeks only. When I left I spoke to him about going to Havana, with the ether and instruments for him. He told me that he would see Mr. Eddy about it; giving me to understand that Mr. Eddy was interested in the patent, and must first be consulted.

I have heard gentlemen who called at the office to purchase rights under Dr. Morton's patent, speak, in their conversations there, of Dr. Jackson, as the author of the "new discovery," and state that they had been so informed by Dr. Morton himself. I remember, at this moment, a gentleman from Philadelphia, another from Vermont, and a third, I think a Mr. Heald, from Portland, in the State of Maine. Indeed, this was evidently the only opinion entertained or expressed in the office while I was connected with it in the fall of 1846, and Dr. Morton never contradicted it, or intimated that it was not founded wholly upon the truth.

J. E. HUNT.

SUFFOLK ss. Boston, May 2d, 1848.—Sworn to by the said J. E. Hunt, this day, before me.

S. W. ROBINSON,
Justice of the Peace.

I, A. Blaisdell of the city of Boston, County of Suffolk, and Commonwealth of Massachusetts, surgeon dentist, on oath depose and say, that during the summer and fall of the year eighteen hundred and forty six, I was associated in the practice of dentistry with Drs. Ball and Fitch, at No. 34 Tremont Row; that on or about the last of September or the first of October of that year, I met Dr. W. T. G. Morton at Mr. Burnett's apothecary store, No. 33 Tremont Row. This was soon after the application of the vapor of ether for the prevention of pain in operations of a surgical nature.

At that time I had a conversation with Dr. Mor-

ton to the following effect: I asked him how he succeeded in the application of ether. He replied, "Most satisfactorily." I then asked him how he had dared to use an agent so powerful? He told me that he had received the most positive assurance from Dr. C. T. Jackson, that it was perfectly safe. I remarked, "Then you have consulted Dr. Jackson?" He replied in the affirmative, and stated that the idea of employing sulphuric ether, for the purpose before mentioned, was first suggested to him by Dr. Jackson. I asked him thereupon if it was Dr. Jackson who made the discovery. Dr. Morton at once answered "that he did, and that Dr. Jackson had communicated it to him, with instructions as to the proper mode of applying the ether; and that having acted in accordance with his advice, his (Morton's) practice had been successful, the result in every way answering to Dr. Jackson's predictions."

Dr. Morton then told me that he was about taking out a patent upon this new application of ether. I asked him how he could do so, since Dr. Jackson was the discoverer. He replied that he had purchased his right of Dr. Jackson, and that Dr. J. had assigned his whole interest to him; for, said Morton, Dr. J. will have nothing to do with any patent. This ended our conversation at this time.

I met Dr. Morton frequently afterwards, and conversed with him upon the subject of ether. He uniformly made the same declarations, awarding the discovery to Dr. Jackson.

On the first day of Dec. following, Dr. Morton notified me to meet him at Mr. Burnett's. I met him as desired. At this interview Dr. Morton stated that he wished to employ me to work in his office, and also to go abroad and sell licenses to use the "Letheon," so called. The following evening we met again by appointment at his own office, No. 19 Tremont Row. Dr. Morton was at this time associated with Dr. N. C. Keep. Upon his expressing the same wish as on the morning before, and making certain proposals, "we closed a bargain." I entered the office of Drs. Morton and Keep, Dec. 14, A. D. 1846. On that day I went to Nashua, in the State of New Hampshire, to sell rights to use the Letheon. In closing a sale with a gentleman of that town, he objected to the phraseology of the license, the plural being used, as though two or more persons were interested in the grant or sale, as follows—"I promise to pay to their order, assigns or legal representatives." The question was asked me why the plural was used, there being but one signature at the conclusion of the license? and also who the person was to whom allusion was made? I answered that Dr. C. T. Jackson was the discoverer of this application of ether, as I had been informed by Dr. Morton, and that he had assigned all of his right and interest under the patent to Morton for a specified sum of money. The gentleman still objected, and called in his counsel, to whom I stated the facts as above; who thereupon advised his client that he could safely make the purchase. I returned to Lowell and sold three or four rights in that city, but encountered the same objection on the part of purchasers. To all of them I made the same statement as above.

Upon my return to Boston, I told Dr. Morton the difficulties in my way, and the statement with which I had opposed them, and asked if I had stated the truth, and the fact as he had given it to me. He replied that I had told the truth, *just as it was*. I also informed Dr. Morton that I found great difficulty in making people believe that ether could be used with safety, unless I gave them assurance, as coming from Dr. Jackson, to that effect. He an-

swered that I must tell them that Dr. Jackson was the discoverer, and that he pronounced it perfectly safe. With this new instruction I started for Providence, Rhode Island, sold the right for that city to two dentists, but was subjected to the same embarrassment as at Nashua and Lowell, and met it in the same way.

On the twenty-first day of December, having returned to Boston, I was in Dr. Morton's office, making preparation, in compliance with his direction, to go to New York, when Dr. Clark, of Lansingburg, in the state of N. Y., called to purchase a right to use the ether. Dr. Clark was very urgent and particular in his inquiries respecting the discovery of this agent and its effects. Dr. Morton told him that Dr. Jackson, the eminent chemist, was the man who made the discovery, and that he had given him (Morton) instructions in regard to its use and effect. Dr. Clark then expressed his satisfaction, and a bargain was effected.

Dr. D. S. Blake was present during this conversation. Soon after, I went to New York in company with Dr. Blake. I sold rights under the aforesaid patent in different parts of that state; also in New Jersey, Virginia, and many of the southern and western states. When in Cincinnati, on my return home, in April of the following year, I received a letter from Mr. Edward Warren, stating that Drs. Jackson and Morton were engaged in a controversy respecting the discovery of the use of ether in surgical operations. This was the first intimation I ever had that Dr. Morton was in any way connected with the discovery.

In June or July following, an article appeared in the "Alliance and Visitor," severely censuring Dr. Morton for permitting the term ether, instead of chloric ether, to be used in a certain affidavit which appeared in the pamphlet published by Edward Warren, leaving it to be inferred by the public that sulphuric ether was intended. At this time I had a conversation with Dr. Hayden, about the statement in his affidavit. I asked him if he did not know, when he swore that Dr. Morton had made use of ether, that it was chloric ether. He replied, "I did, but I thought I would write it as I did, and let people draw what inferences they pleased as to the kind used." A few minutes after, Dr. Morton came into the office, and I handed him the article referred to. I asked him what he thought of it. He answered, "that he never told any one that he used sulphuric ether until he received it from Dr. Jackson." I have heard Mr. Edward Warren say that he "did not know or care to whom the discovery belonged, but that he meant to fight it through, and get all the credit for Morton." Both Warren and Morton have told me that he (Warren) was to have one half of the pecuniary profit arising from the discovery.

A. BLAISDELL.

SUFEOLK, ss. May 27, 1848.—Sworn to before me.

F. K. BARTLETT,
Justice of the Peace.

I, Silas T. Gladwin, of Lowell, County of Middlesex, and Commonwealth of Massachusetts, dentist, on oath depose and say, that on or about the 15th day of December, 1846, Dr. A. Blaisdell, of Boston, called at my office in Lowell, to sell me a right to use the "Letheon," so called; that Dr. Blaisdell then and there stated to me that he was the duly authorized agent of Dr. W. T. G. Morton, of Boston, to sell rights to the said "Letheon."

Dr. Blaisdell, during the interview, stated to me substantially and distinctly as follows. That the idea, that the "Letheon," or vapor of sulphuric ether, would produce insensibility to pain during the performance of operations of a surgical nature, was the discovery of Dr. Charles T. Jackson, of Boston, who had imparted it to Morton, with instructions as to the nature and properties of the ether, the effects which it would produce, and the results which would follow its application; and also, instructions as to the mode in which it was to be applied. That Dr. Jackson being its discoverer, a man of science, and a great chemist, and the experiments which had been made having been according to the directions of Dr. Jackson, and having resulted according to his predictions, I need have no fear as to the perfect safety, practicability, and efficacy of the new agent, in producing insensibility to a sufficient degree, and for a sufficient length of time, to enable me to perform any dental or surgical operation under its influence, without pain to the patient. That Dr. Morton had only bought Dr. Jackson's right to the discovery; had got hold of it before any one else; had first received it from Dr. Jackson, and that he (Morton) was a go-ahead fellow, and would make a fortune out of his, a bargain gained and purchased, interest in the new discovery.

SILAS T. GLADWIN.

COMMONWEALTH OF MASSACHUSETTS. Middlesex, ss. Lowell, April 20, 1848.—Sworn to before me.

WILLIAM SMITH,
Justice of the Peace.

I, Samuel Lawrence, of Lowell, County of Middlesex, and Commonwealth of Massachusetts, on oath depose and say, that on or about the 15th of December, 1846, Dr. Alvah J. Blaisdell, of Boston, called at my office in Lowell, and announced himself as the agent of Dr. W. T. G. Morton, of Boston, to sell for him patent rights for the use of the "Letheon," so called. I did not purchase a right of Dr. Blaisdell, for the reason, as I stated at the time, that I had previously used sulphuric ether with good success; that I was perfectly satisfied that it was safe, if judiciously applied. Whereupon, Dr. Blaisdell went on to state that I could not use sulphuric ether, without infringing on the patent which Morton had procured on the "Letheon." I replied that I cared nothing for Morton's patent, for that I did not believe that sulphuric ether was patentable, any more than any other common drug or medicine. Dr. Blaisdell threatened me with prosecution if I used the ether; and upon his offering me a right for seventy-five dollars, I told him I would not give him twenty-five cents for one.

Dr. Blaisdell stated to me that the "Letheon" was perfectly safe; that I might rely upon its safety, for that Dr. Charles T. Jackson, one of the best chemists in the United States, discovered it, and imparted the discovery to Morton; that Dr. Jackson had given Morton directions and instructions how to apply the ether; that Dr. Jackson had also used it himself, and considered it perfectly safe; and that Dr. Morton, by the permission of Dr. Jackson, had taken out his patent.

Dr. Blaisdell gave me distinctly to understand, that Dr. Jackson first discovered the idea that the vapor of sulphuric ether would produce insensibility to pain during surgical operations, and I received from my conversation with Blaisdell the idea that "Letheon" was nothing but sulphuric ether.

SAMUEL LAWRENCE, *Dentist.*

COMMONWEALTH OF MASSACHUSETTS. Middlesex, ss. April 20, 1848.—Sworn to before me,

I. B. ABBOTT,
Justice of the Peace.

I, Daniel S. Blake of Boston, in the County of Suffolk, and Commonwealth of Massachusetts, dental surgeon, on oath depose and say, that I was, on the twenty-first day of December, 1846, employed by Dr. W. T. G. Morton as his agent to sell patent rights of the "Letheon," or the application of sulphuric ether to the relief of pain attending surgical operations; and in pursuance of my duty, as his agent, I travelled through parts of New York, New Jersey, Connecticut, Pennsylvania, and sold rights to different persons. Under Dr. Morton's instructions, I uniformly said that the application of sulphuric ether to the relief of pain attending surgical operations, was discovered by Charles T. Jackson, M. D., of Boston; that Morton had contrived the instrument with which the ether was applied, and which I carried with me for sale; and that Morton had purchased of Dr. Jackson his interest in the right to use the ether, and with Dr. Jackson's concurrence, Morton took out a patent for the new application of the ether, and was the proprietor of the patent. I was obliged repeatedly to explain to every person to whom I sold a right, who Dr. Jackson was, and who Dr. Morton was. The facts which I communicated I derived from Dr. Morton himself; and I was astonished when I heard that he pretended to be the discoverer of what he had so many times told me had been discovered by Dr. Jackson.

The first time that I had any conversation with Dr. Morton upon the subject of the discovery of the application of sulphuric ether to the relief of pain attending surgical operations was, when the discovery had been but lately made known, viz., in the fall of 1846. It was, I remember, on the day that the operation in surgery was performed at the Bromfield House, in which sulphuric ether was used. I asked Dr. Morton of the origin of the discovery, and he then told me that Dr. Charles T. Jackson had made the discovery, and had communicated it to him a short time previous, and that he first applied it under Dr. Jackson's directions.

Afterwards, on the 22nd day of December, 1846, a few minutes before I started as Dr. Morton's agent to sell patent rights, I heard Dr. Morton explain to Dr. Clark, of Lansingburg, New York, (who was then at Dr. Morton's office, having just purchased of Morton a right to use the "Letheon,") the origin of the discovery; and Dr. Morton then said, that Dr. Charles T. Jackson was the discoverer of the application of sulphuric ether to the relief of pain attending surgical operations, and that he, Morton, had got an interest in the matter by incurring the expense and trouble of securing the patent and obtaining the instrument used in applying the ether; that this instrument he, Morton, invented. Dr. Alvah Blaisdell, dental surgeon, of this city, was present when Dr. Morton explained to Dr. Clark the origin of the discovery, and his connection with Dr. Jackson in the matter.

Dr. W. T. G. Morton always said, and gave me to understand in all my interviews with him, (and I was his agent in selling patent rights for the use of the "Letheon" or sulphuric ether for about two months,) that Dr. Charles T. Jackson was the original discoverer of the application of sulphuric ether to the relief of pain attending surgical operations; that he, Morton, had in the autumn of 1846 first

used sulphuric ether, and then had used it and applied it under the instructions and directions of Dr. Jackson.

DANIEL S. BLAKE.

COMMONWEALTH OF MASSACHUSETTS. Suffolk ss. Boston, Aug. 16, 1847.—Then personally appeared before me the above-named Daniel S. Blake, and made solemn oath to the truth of the statement above subscribed by him, before me,

JOHN G. KING,
Justice of the Peace.

I, J. A. Robinson, of Salem, County of Essex, and Commonwealth of Massachusetts, on oath depose and say, that in the fall of 1846 I called at the office of Dr. W. T. G. Morton, in Boston, to negotiate with him for the purchase of a right to the "Letheon," so called. I spent about an hour in conversation with him. From Morton's conversation I came to the conclusion that Dr. Jackson was the discoverer of the new application of ether. I remember asking Morton, "How he could sell a right to the new agent, Dr. Jackson having discovered it?" He replied distinctly and in substance, "that he had purchased of Dr. Jackson the exclusive right to the discovery, and patented it." Morton unreservedly admitted that there was some one behind himself connected with the discovery as its originator, and that that person was Dr. Charles T. Jackson. I was convinced, from Morton's statements and admissions, that his own interest in the new discovery was exclusively a pecuniary interest. He did not seem to consider himself in any sense connected with the originating of the discovery, but seemed to think of nothing but his patent right.

J. A. ROBINSON.

ESSEX, ss.—April 22, 1848.—Subscribed and sworn to before me,

A. HUNTINGTON,
Justice of Peace.

I, Nathan B. Chamberlain, of the City of Boston, County of Suffolk, and Commonwealth of Massachusetts, philosophical instrument maker, depose, that in the summer of the year eighteen hundred and forty-six, Mr. W. T. G. Morton called at my rooms, No. 9 School street, to consult with me in relation to certain apparatus with which he proposed to furnish his office. He first employed me to construct a turning lathe with the usual appliances. Subsequently, and late in the summer, or early in the autumn of that year, Mr. Morton asked me if I could make for him a compound blow-pipe, inasmuch as in the fitting out of a dentist's office that would in his opinion come next. He remarked that he wished to use the blow-pipe in soldering. Mr. Morton then stated that he wanted an instrument which would be snug and convenient, and which he might easily stow away under his table, and asked many questions as to its construction and expense. I told him that he might have a blow-pipe, furnished with India-rubber bags, and these would be both cheap and convenient. Mr. Morton then questioned me with regard to the kind of gas with which he ought to fill the bags, and what would be the cheapest; whether he might employ street gas, and how he himself might make it. During the whole of the conversation no allusion whatever was made to the subject of sulphuric ether, and I feel perfectly confident that he had no idea of using the India-rubber bag for any other purpose than the one before mentioned.

Upon stating to Mr. Morton the expense of a blow-pipe, constructed and furnished in the way described, he objected to my price, and asked if such apparatus

was made elsewhere in the city. I referred him to Joseph M. Wightman. He at once asked who Mr. Wightman was, and where he could find him, where his place of business was, &c. Mr. Morton then left my room, and I had no further transactions with him until he sought my assistance in constructing the "ether inhaler," so called. This was in October of the same year. He then called upon me at my place of business, and stated that he was in possession of a "preparation" to produce insensibility to pain during the performance of operations upon the teeth, and wanted me to provide him with some instrument for inhaling it. I believed, from an odor about the person of Mr. Morton, that this preparation was sulphuric ether. I am certain that this was several days after the first of October, of the year 1846. Mr. Morton, by his conversation at the time, gave me every reason to believe that some one other than himself was the discoverer of the "preparation." He said distinctly that it was the suggestion of another, and from Mr. Morton's manner of speaking of Dr. Jackson in connection with the "preparation," as he did quite frequently during the interview, no doubt was left on my mind that Dr. Jackson was the discoverer.

I remember that after Mr. Morton left my room my brother, who was then with me, and was present during the said interview, spoke of the "preparation" as being the idea of Dr. Jackson. We both inferred this from Mr. Morton's conversation with us, during the whole of which he did not mention the name of any other chemist, or any one other than Dr. Jackson, in connection with the discovery which he wished to apply, and did not speak of, or in any way seem to consider, himself as the originator of it. Subsequently, as late as the 13th of October, 1846, he called to get the inhaler, with which I had furnished him, repaired. I knew that it was sulphuric ether for which it had been used.

At this time he gave me no reason to change or modify any impression or belief which I had obtained from him at the former interview.

When I heard that Mr. Morton claimed the discovery as being his own, I was surprised, for it was contrary to my previous convictions and belief, as derived from Morton's own statements. I had never hesitated to pronounce Dr. Jackson the discoverer of the application of ether to the purposes before mentioned.

N. B. CHAMBERLAIN.

I, David K. Hitchcock, of the City of Boston, surgeon dentist, depose and say, that on the second or third day of October, in the year 1846, I had a conversation with Dr. Charles T. Jackson, upon the application of the vapor of ether to produce insensibility to pain. At this interview, Dr. Jackson related to me the circumstances under which he had communicated the discovery to Dr. W. T. G. Morton, and also gave his opinion relative to the proper, safe, and judicious administration of the new agent.

Dr. Jackson stated distinctly, that he had the utmost confidence in his discovery, and that he had no doubt that even severe surgical operations might be performed upon persons who had inhaled the vapor of pure sulphuric ether, with entire insensibility to pain. He also stated, that the new agent should only be employed by careful and scientific practitioners; and his chief apprehension seemed to be, that its use might be perverted in the hands of the ignorant, reckless, or unskilful, and thereby dangerous results ensue. Dr. Jackson was always very particular in saying, that only pure and highly

rectified ether could be employed with safety. At various subsequent interviews, which I had with Dr. Jackson, during the month of October, he stated to me, that he was opposed to taking out a patent upon his discovery; and, moreover, that he was, in principle, opposed to patenting any new medical agent whatever.

DAVID K. HITCHCOCK.

I, R. C. Bartlett, of Boston, County of Suffolk, Commonwealth of Massachusetts, depose and say, that I was a member of the family of Dr. Charles T. Jackson, in the summer of 1844; that I am the aunt of Dr. Jackson's wife, and must be the person referred to in Mr. W. T. G. Morton's memoir to the Academy of Sciences at Paris, as published in No. 201 of *Littell's Living Age*, in Boston aforesaid, and therein styled the aunt of Dr. Jackson, in the paragraph which here follows. "About this time," in the summer of 1844, "the wife and aunt of Dr. Jackson were under my treatment for dental purposes, and it was necessary to extract teeth in each case, the operation being painful, and the ladies showing an unusual degree of sensitiveness. The last named lady, in particular, before the extracting of each tooth, remained several hours in the operating chair, unable to summon courage to endure the operation, and begging to be mesmerized, or that I would give her something to make her insensible. Dr. Jackson was present, and made efforts to encourage the lady, but did not suggest any mode of producing insensibility," &c.

Dr. Jackson was not present at the time above alluded to by Mr. Morton, and I am sure that he had no knowledge of the operation until after it had been performed. Everything which Mr. Morton has stated in respect to my reluctance, my begging to be mesmerized, or to be made insensible in any way, and the time of my remaining in the operating chair, is wholly untrue.

I did not remain in his office longer than an hour in all. I subsequently told Dr. Jackson that I had had quite a number of teeth extracted by Mr. Morton, when he expressed great surprise, and great displeasure with Mr. Morton, and thought it unsafe to have so many teeth extracted at one sitting.

Dr. Jackson never was present at any operation performed upon my teeth by Mr. Morton.

R. C. BARTLETT.

I, Elizabeth Bridge, of Boston, in the Commonwealth of Massachusetts, on oath depose and say, that I am the sister of Rebecca C. Bartlett, and that I went to Mr. Morton's office with her, in June, in 1844, at the time that she had her teeth extracted; that Dr. Jackson was not present, and did not (to my knowledge) know that the said Rebecca C. Bartlett intended to have the operation performed of extracting the teeth.

Signed, ELIZABETH BRIDGE.

COMMONWEALTH OF MASSACHUSETTS. Suffolk, ss. Boston, the twenty-fourth day of March, in the year eighteen hundred and forty-eight.

Then personally appeared the above named Elizabeth Bridge, and made oath that the foregoing affidavit by her subscribed is true. Before me,

ABRAHAM JACKSON, JR.,
Justice of the Peace.

Boston, May 1 1847.

DEAR SIR,—In compliance with your request, I offer you the following account of my experiments and observations, made several years ago, on the inhalation of vapor of pure sulphuric ether. I was previously aware, from the experience of others, and from my own experiments, of the kind of intoxication which is produced by the inhalation of that vapor. It was not known at that time, however, that an insensibility could be produced by this agent, of safe and short duration. I moistened a cloth and laid it over my mouth and nostrils, and laid myself back in a rocking-chair, and inhaled the vapor, noticing its effects on the system. The first impression was that of coolness, then a sensation of warmth and exhilaration, with a singular feeling of excitement in the chest. This was followed by a loss of consciousness, from which I in a short time awoke; soon afterwards I entirely recovered from the effects of the ether.

I have frequently inhaled the vapor of sulphuric ether to relieve the irritation occasioned by breathing noxious gases. During the winter of 1841-42, and not long after the experiment above described, I was preparing chlorine gas to be used in a lecture before the Massachusetts Charitable Mechanic Association, and, while collecting the chlorine in large glass bottles filled with boiling water and having their necks immersed in a pneumatic cistern, my assistant, who was holding a bottle, accidentally let it fall, and it broke while my face was quite near to it. I immediately inhaled a large volume of this gas, which nearly suffocated me, so that with great difficulty I got into the house.

As soon as I could get assistance, I sent for sulphuric ether and ammonia, and inhaled them alternately, hoping thus to neutralize the chlorine by the hydrogen of the ether, and the acid so formed by the ammonia. I received some relief for the time, but I was so much depressed, and felt such a weight upon my chest, that I feared I should not be able to give my lecture. I gave it, however, without much difficulty. Afterwards, still suffering from the effects of the chlorine, I thought I would try the ether vapor again, and for a longer time. I went, therefore, into my office, which is connected with my house, and, taking the bottle of pure sulphuric ether from the laboratory, I soaked a folded cloth in it, squeezed it out slightly, and seating myself in a rocking-chair, with my feet resting upon another chair, I commenced inhaling the ether from the cloth, which was placed over my mouth and nostrils, while my head was laid back against my chair, so that I was quite at ease in a fixed position. The effects of the inhalation were as before described, excepting that it made me cough at first. I was, therefore, led to believe, that the paralysis of the nerves of sensation would be so great, during the continuance of the insensibility, that a surgical operation might be performed upon a patient under its influence, without giving him any pain; for the loss of consciousness was remarkable, perhaps resembling that of epilepsy more than any other kind of insensibility. I heard afterwards of other cases of this insensibility accidentally produced, and I became perfectly convinced that the inhalation of the ether would be safe,—an opinion first formed from my own earlier experiments. I now felt prepared to recommend the trial of sulphuric ether vapor for the prevention of pain in surgical operations. The subsequent history of its application to that purpose is known to you from the evidence of others. I will add, that my interest in the respiration of gases

was first excited by Sir H. Davy's experiments, and that since I became acquainted with them, the subject has always seemed to me to deserve further investigation.

I am, with great regard, your friend,
CHARLES T. JACKSON.

DR. MARTIN GAY.

I, Samuel A. Bemis, of Boston, in the County of Suffolk, and Commonwealth of Massachusetts, dentist, depose and say, that on or about the twenty-ninth day of September, in the year eighteen hundred and forty-two, I was residing as a boarder at the Mt. Crawford House, at Harts Location, in the County of Coos, and State of New Hampshire. That, on or about the said twenty-ninth day of September, Dr. Charles T. Jackson, of Boston, being at that time engaged in a geological survey of New Hampshire, stopped at the said Mt. Crawford House.

Dr. Jackson had, for some years prior to the above date, been an acquaintance of mine. During some conversation that occurred between Dr. Jackson and myself, at the time and place above mentioned, and in presence of several other gentlemen, among them Mr. William F. Channing, of Boston, then an assistant of Dr. Jackson, various remarks were made respecting my own profession; and the subject of pain and painful operations was introduced by Dr. Jackson, as being incident to its practice. Dr. Jackson then remarked that it was his wish to alleviate or destroy all sensation of pain and suffering during operations of a surgical nature, and asserted that this result would be secured by the introduction of a new mode of practice in such operations. After making several observations upon the importance of some new treatment or agent which would prevent all consciousness of pain, Dr. Jackson said that, if I desired it, he would give or provide me with something which he knew would effect that object, and also proposed to me to introduce the same into my profession. I have no doubt whatever that the plan communicated to me at the time was the same in regard to the substance to be used, viz., sulphuric ether, and in all other respects, as he has since promulgated to the world. Dr. Jackson also remarked that he had been induced to try its effect upon himself, when suffering in consequence of some accident, and that he had been completely successful in its application. To all of which I replied, as a reason why I should not be willing to introduce the use of this new agent into my own practice, that, in such operations as came under my particular care, there was seldom much suffering; and that I had more often found difficulty in impressing my patients with a belief that there was really no necessity for operations, than to persuade them to submit when operations were deemed necessary. In fact, the principle of my practice was to save teeth, and to keep them in the head, rather than to extract them. I had no doubt at the time that Dr. Jackson regarded the successful application of the new agent, above referred to, to the purposes above mentioned, as not only practicable, but quite within the grasp of the scientific operator; and I expected to meet with an account of it at some future day through the scientific journals.

S. A. BEMIS.

Boston, May 20, 1847.

Sworn to before me,
JOSIAH QUINCY, JR.,
Justice of the Peace.

Boston, April 27, 1848.

MY DEAR SIR,—In reply to your inquiries, yesterday, I have to remark, that I distinctly remember the substance of the conversation which passed between us, in the spring of eighteen hundred and forty-two, concerning sulphuric ether. The conversation took place at your office, where I was passing the evening. Observing that you were suffering from severe pain in the head, I was about to take leave, when you requested me not to do so, remarking, that in ten or fifteen minutes you would probably be free from pain. I replied: "Were I subject to attacks so severe, and of such short duration, I should inhale nitrous oxide." My remark was not intended to be understood seriously. You answered: "Some of your sulphuric ether would be much better;" and added, "Are you aware, that when inhaled it produces complete insensibility?"—or words to this effect.

I was aware of this fact; but, at the time, my impression was, that either nitrous oxide or the vapor of ether, inhaled frequently, would be attended with evil consequences, if not fatal.

The ether to which you referred, was some which I had prepared for use in my private laboratory. It was pure sulphuric ether, and very different from the sulphuric ether of the shops—such as was then only to be found in the market.

With kind regards, I remain, dear Sir,
very truly your friend,

JOHN H. BLAKE.

DR. CHARLES T. JACKSON.

I, William Francis Channing, of Boston, in the County of Suffolk, and Commonwealth of Massachusetts, doctor of medicine, affirm that in the month of March, in the year eighteen hundred and forty-six, I accidentally inhaled chlorine in the laboratory of Dr. Charles T. Jackson, of Boston. The effect was to produce spasms of the chest and distress of respiration, of such a character as to make me apprehend an immediately fatal result. I at once inhaled the vapor of ammonia and alcohol from the mouth of the vessels containing the same, for the purpose of neutralizing the chlorine, but found very slight relief. I also swallowed some brandy, which gave momentary, but no permanent relief. Dr. Jackson, who had then returned to his office, advised me to try the inhalation of sulphuric (hydric) ether, which he stated that he had himself used with success in an accident of the same kind; and he directed its application by means of a handkerchief. The inhalation of the ether produced an immediate suspension of the spasms, with entire relief from the distress. They recurred again after a time with less violence, but were subsequently entirely removed by occasional inhalations of ether; so that, in about one hour after the accident, I was enabled to walk from the laboratory without difficulty.

Several days after, inflammation of the lungs resulted from the irritation of the chlorine, connected with exposure to cold. In consequence of the great relief produced in my own case by the inhalation of ether, I recommended it shortly after my recovery, to be used as a remedy in ordinary cases of spasm of the chest.

I have heard Dr. Jackson speak on several occasions of the inhalation of sulphuric (hydric) ether, for producing insensibility to pain during operations of a surgical nature. These conversations with Dr. Jackson took place, according to my recollec-

tion, certainly more than a year and a half ago; and my own impression is very strong, that the earliest communication on this subject took place during the summer or autumn of 1842, while I was acting as assistant with Dr. Jackson on the geological survey of the State of New Hampshire.

WM. F. CHANNING.

SUFFOLK, ss. Boston, May 12, 1847.—Affirmed by the said William F. Channing, before me,
ELLIS GRAY LORING,
Justice of the Peace.

I, Joseph Peabody, of Salem, in the Commonwealth of Massachusetts, depose and say, that I have been for some time a student in chemistry in the laboratory of Dr. Charles T. Jackson, of Boston; that, in the latter part of the month of Feb., 1846, Dr. Jackson related to me that he had discovered certain remarkable properties in sulphuric ether; that, by freely inhaling it, a state of unconsciousness was produced, with insensibility to pain.

The circumstances under which this communication was made to me were as follows:—I was suffering from a severe toothache; and, intending to have two teeth extracted, a fellow-student urged me to try the power of mesmerism to effect insensibility to pain, offering to attempt to produce the magnetic state. I consented, and he commenced the experiment. While we were thus engaged, Dr. Jackson came into the office, and remarked that it was a loss of time and labor to attempt to repeat the experiments of the mesmerizers; for their insensibility was only a pretence. "If you want to have your teeth extracted without pain," said he, "I have mesmerism bottled up in the other room—in the shape of sulphuric ether." He then repeated to me minutely the effects which would be produced by the inhalation of sulphuric ether. I asked him where he got his information from. He said that he had tried it on himself; that, about four years before, he inhaled it freely with a view of ascertaining the effects of its vapor on the system, and was astonished to find it produced an entire loss of consciousness; that this state speedily passed away, without leaving any unpleasant effects. He said that subsequently, while engaged in preparing some chemical experiments, he accidentally got his lungs full of chlorine, which produced a sudden irritation and severe distress; that, hoping to obtain relief, he applied to sulphuric ether; that he breathed the vapor copiously—having poured the ether upon a cloth which was laid over his mouth. He soon became unconscious and perfectly free from pain, although the trouble in his lungs returned when the effects of the ether had wholly passed off. He urged me to apply the ether when I wished to have my teeth extracted, assuring me of his confidence that I would escape the pain of the operation. He added that ether prepared expressly for the purpose, and freed from its alcohol, would ensure success. I immediately determined to make the trial; and, as I was obliged to return to Salem, I there commenced to re-distill some ether with sulphuric acid.

In the mean time I consulted several chemical and medical works, (in a large scientific library to which I had access,) in relation to the effects of sulphuric ether; and found that all the authorities stated that the action of ether upon the system was injurious, and warned against its use. My father was also averse to my breathing it. I therefore concluded that the operation proposed would not be sufficiently serious to warrant me in using any ap-

plication pronounced dangerous by high authorities. Upon my return to Dr. Jackson's laboratory, I stated to him the opinion of chemical and medical writers in relation to the use of ether. He said that he was aware of the opinions in the works upon the subject; but, notwithstanding their views, he was satisfied that he was right—that the application of ether would be perfectly harmless, and its effects would be what he had stated.

This was not the only occasion on which the subject of the effects of ether was introduced. He alluded to it in several subsequent conversations, and always with the same confidence, so that when I learned the final success of the application I was not at all surprised.

I returned to Dr. Jackson's laboratory about a week after he had communicated his discovery to Mr. Morton, and since that time have been constantly with him; and I can most positively state that not at any time has he shown the least want of confidence in the importance of his application, and not for a moment did he undervalue it, nor has he ceased to assert his claims as the sole discoverer.

JOSEPH PEABODY.

UNITED STATES OF AMERICA, STATE OF MASSACHUSETTS. COUNTY OF SUFFOLK, ss. City of Boston.—On this eleventh day of May, A. D. eighteen hundred and forty-seven, before me, came Joseph Peabody, and, being duly sworn, did depose and say as within written, and did sign the said within writing, as his deposition in and concerning the matters therein specified.

In witness whereof, I have hereunto set my hand and seal of office, on this said 11th of May, A. D. 1847.

JOHN P. BIGELOW, *Notary Public.*

I, George O. Barnes, of the City of Boston, and Commonwealth of Massachusetts, on oath depose and say, that Mr. W. T. G. Morton did not, on the thirtieth day of September of the year 1846, take from the laboratory of Dr. Charles T. Jackson a glass tube or flask, or any apparatus whatever for the inhalation of sulphuric ether. This is the day referred to in my former deposition, on which Mr. Morton called upon Dr. Jackson to procure an India rubber bag for the object therein mentioned. I was in the laboratory during the whole time that Mr. Morton remained, and heard the conversation between Dr. Jackson and himself.

He did call two or three days after to procure such apparatus, and Dr. Jackson then gave him the glass flask and tube, with instructions for their use.

GEORGE O. BARNES.

SUFFOLK, ss. Boston, May 2, 1848.—Sworn to this day by the said George O. Barnes, before me,
S. W. ROBINSON,
Justice of the Peace.

I, George O. Barnes, of Plymouth, in the Commonwealth of Massachusetts, depose and say, that in the fall of 1846 I was a student in chemistry with Dr. Charles T. Jackson; that in the month of September I was at work in the back room of Dr. Jackson's laboratory when Mr. W. T. G. Morton passed through the room, as I supposed to go into the house which adjoins the laboratory. He soon returned, having in his hand an India rubber bag belonging to Dr. Jackson. As he went into the apparatus or glass room, I heard Dr. Jackson ask

Morton what he wanted to do with the bag. He replied that he had a refractory patient who would not allow him to take out her tooth, and that he wished to act on her imagination so as to induce her to submit to the operation; that he meant to fill the bag with air, meaning, as I understood, atmospheric air, which would give it a formidable appearance. He then asked how he should go to work to distend the bag. "The lungs or a pair of bellows," said Dr. Jackson, "can do that." "But," continued Dr. Jackson, "your proposition, Morton, is very absurd; the patient will not be deceived in that way; you will produce no result, and will be denounced as an impostor."—"I don't know that," replied Morton: "I think with this bag under my arm, well blown up, that I could make her believe anything." While saying this, he placed the bag under his arm, and, pressing the bag with his elbow several times, illustrated the manner in which he would operate. "If I could once get her mouth open," said Morton, "I would have her tooth out. Why," said he, "a man once bled to death by the mere force of imagination." As he was proceeding to give an account of this experiment, Dr. Jackson interrupted him, and said, "Pooh! you don't credit such a story as that, surely! I advise you to have nothing to do with this idea of using atmospheric air to deceive your patients; it will only injure you." Morton replied, "I don't care. I'll blow it up." Morton then left Dr. Jackson, and was going from the glass room, where the latter part of the conversation had been principally held, into the front room towards the street door, with the bag swinging in his hand, when Dr. Jackson followed him, took the bag from his hand, and threw it on the floor. There had been also some conversation concerning nitrous oxide, but not one word concerning sulphuric ether; and Morton had not asked Dr. Jackson to suggest to him anything to prevent pain during his operations of extracting teeth. Dr. Jackson then addressed him, and said, "Now, Morton, I can tell you something that will produce a real effect. Go to Mr. Burnett's, the apothecary, and get some very strong sulphuric ether, the stronger the better; spatter it on your handkerchief, put it to your patient's mouth, take care that it be well inhaled, and in a minute or two perfect insensibility will be produced." "Sulphuric ether!" said Morton, "what is that? Is it a gas? Have you got any of it? Show it to me." Dr. Jackson went to the laboratory case, and took down the bottle of sulphuric ether, which Morton examined and smelt of as though he had never seen the article before, saying, it was "queer smelling stuff." "Are you sure," said Morton, "that this will do it?" "Yes," replied Dr. Jackson, "I am sure." The rest of the Doctor's reply I did not hear, as I passed into the other room for some purpose, being engaged at the time in analytical work. Afterwards I heard Morton several times repeat, "Are you sure it will do it?" He even asked Mr. McIntyre, another student in the laboratory, and myself, if we thought it would do it. "Won't it hurt the patient?" said he. "No," replied Dr. Jackson, "it will not do any harm; for I have tried it on myself." He then briefly described his own experiments and the effects, and said "that the patients, after breathing a dozen breaths, would fall back in the chair insensible; and you can do with them as you please, without their knowing anything about it, or feeling any pain; so that you can take out their teeth at your leisure." Dr. Jackson distinctly said, "It will not do the least injury, I as-

sure you." Indeed, Dr. Jackson urged the matter very earnestly and with perfect confidence, taking on himself the whole responsibility. He urged Morton to try it on himself, saying that it was the only way to convince himself. "Shut yourself up," said he, "in your room, and breathe it as I have directed." At the same time, Dr. Jackson, taking a handkerchief and bottle in his hands, went through the movement of applying the ether to it, and, placing the handkerchief to his mouth, made several deep inhalations, saying, "This is the way you must take it." Morton then left, promising to try it immediately. After Morton left, the students in the laboratory conversed considerably about the proposed experiment; and some one asking the question whether Morton would succeed, Dr. Jackson said confidently, "He will, if he follows my directions."

Either on the afternoon of the same day, or the next day, I am not positive which, Morton came to announce the success of his trial. He stated that he tried it on a patient with complete success; for, while he extracted a tooth, the person was insensible, and knew nothing about it. Dr. Jackson expressed no surprise, but appeared as if he had expected this result. Mr. Morton intended soon to perform another extraction. Dr. Jackson then said to him, "You must go to Dr. Warren, and obtain his permission to administer it at the Massachusetts General Hospital, and if possible it should be on a capital operation; for people will not believe in the insensibility to pain in case of a mere tooth, since it is very common for patients in an ordinary case to say that it did not hurt them, when the twitch is very sudden, and the operation skilfully performed: this proof would not be regarded by the public as satisfactory." Morton strongly objected at first to going to the hospital—that everybody could smell the ether, and it would not be kept secret, which it was Morton's object to do. He asked if something could not be put into it which would conceal the ether odor. Dr. Jackson replied, "Yes; some French essence, as the oil of Neroli, may answer in a measure, and a pleasant perfume will be left on the patient;" remarking, laughingly, "The scent of the roses will hang round him still." After some argument, and Dr. Jackson's further insisting upon it, Morton promised to go to the hospital.

In the course of this conversation, Morton repeatedly begged the doctor to keep the matter a secret. "No!" answered Dr. Jackson, "I will have no secrets with my professional brethren. I intend to give Dr. Keep the same information which I have given to you;" and, in point of fact, every one who afterwards came to get information on the subject was at once told all about it.

Some time after this, when the experiments had proved successful at the hospital and elsewhere, and while the patent was being negotiated, the right of using the ether having been assigned to Morton, Dr. Jackson urged him in my presence to present the free use of it to the hospital, saying that they would not buy a patented article, and it ought to be given to the poor. Morton was very reluctant to do this, and asked if there were not some pay patients at the hospital who could afford to remunerate him for administering the ether. This was argued a long time, and Morton finally said that he would do so.

A few days after, Morton called at the office, when Dr. Jackson was not in, with a glass bulb in his hand, having only two openings. He proposed to fasten an India rubber bag upon one of the open-

ings to contain the sulphuric ether, a sponge to be placed in the bulb, and the patient to inhale the ether from the other opening; there being no aperture for the admission of atmospheric air. His intention was, he told us, that the patient should breathe the ether vapor pure, without admixture of atmospheric air. I told him of the indispensability of atmospheric air, knowing very well that it would be dangerous to breathe ether vapor without the common air being mixed with it. He was told, also, that the ether would dissolve the India rubber. He then said that he would stop the opening with a cork, instead of the bag; intending still to exclude the common air.

Some time after, I heard Dr. Jackson speak of Morton's being reckless. He had heard that Morton did not manage well in the administration of the ether. Dr. Jackson expressed his opinion that it ought to be in the hands of careful and skilful persons. In fact he was sorry that he had communicated his discovery to Morton, and that he had employed him to make those early experiments with the ether. He spoke strongly upon these points.

GEORGE O. BARNES.

Boston, May 21, 1847 —Sworn before me,
JOSIAH QUINCY, JR.,
Justice of the Peace.

I, James McIntyre, of Bangor, in the State of Maine, depose and say, that in the month of September, 1846, I was a student in chemistry with Dr. Charles T. Jackson, of Boston. In the latter part of September, I was sitting in the front room or office of Dr. Jackson's laboratory, when Mr. W. T. G. Morton came in and asked for Dr. Jackson, and passed through the office into the house adjoining the laboratory. In a short time Morton came into the back room with an India rubber bag in his hands, and passed through into the glass room. Dr. Jackson came in with him, or shortly afterwards. Dr. Jackson asked Morton what he wanted with the bag. He said he wished to blow up the bag, and act upon a patient's imagination by making her breathe from the bag. The precise words of Morton's answer I do not remember; but the purport of it was, that he wanted to extract some teeth from a lady who objected on account of the pain, and that he expected, by making her breathe from the bag, to believe that she would suffer no pain from the extraction of her teeth. In order to show the effect of imagination, he gave an account of an experiment upon two criminals, one of whom was bled to death; and the other, having his arm pricked and warm water poured upon it, died from the effect of the imagination. Dr. Jackson said that it was absurd, and never occurred. He told Morton that it would be useless to try that, as he could not act upon her imagination; and, if he failed, she would set him down as a humbug. There was then some conversation about the use of exhilarating gas, whether it was first mentioned by Dr. Jackson or Morton, I do not remember. Morton asked if he could not make it. Dr. Jackson told him that he could not succeed without apparatus, and the assistance of some one who had some chemical knowledge; and that, if he undertook to make it, he would get nitric oxide instead of nitrous oxide. He asked Dr. Jackson if he could not prepare some for him; this Dr. Jackson declined to do, on account of his business. Morton was then going away with the bag, and I have no doubt intended to use the bag by distending it with atmospheric air.

As he was going, Dr. Jackson told him that he could tell him something that would make the patient insensible, and then he could do what he had a mind to with them. Morton asked what it was. Dr. Jackson then told him to go to Burnett's, and get some pure sulphuric ether, and pour it on a handkerchief, and put it to the patient's mouth and let her inhale it. Morton asked what sulphuric ether was, what kind of looking stuff it was. I stayed in the front room while Morton and Dr. J. went to look at the ether. From Morton's question about the ether, I am satisfied that he knew nothing about its properties or nature. I heard Morton ask Dr. Jackson very particularly whether it would be safe to use it. Dr. Jackson assured him that it was perfectly safe, and alluded to the students at Cambridge having used it. Morton appeared to be afraid to use the ether, and asked him several times if it was safe. Dr. Jackson advised Morton to try it himself. Morton asked me if I would be willing to take it. I told him that I would. The whole conversation between Dr. Jackson and Morton I did not hear, as I was not all the time in the room with them. But I felt sure, from the conversation I had heard, that he came to the laboratory without any idea of using ether, or anything else which would destroy sensibility to pain; that he knew nothing about its properties; that the effect which ether would produce was communicated to him by Dr. Jackson; and that he was induced to try it only by the repeated assurances of Doctor Jackson, that it would produce insensibility, and could be administered with safety. The next day after the above conversation, Morton came into the office, and told Dr. Jackson that the ether had worked nicely; that the patient suffered no pain.

During the time that I was in Dr. Jackson's laboratory, I never heard him express any doubt about the effect which ether would produce in causing insensibility to pain, but have heard him say that it ought to be administered with care, and by persons acquainted with the nature of it.

Signed,

JAMES MCINTYRE.

UNITED STATES OF AMERICA, STATE OF MASSACHUSETTS. County of Suffolk, ss. City of Boston.—On this first day of April, A. D. 1847, before me, came James McIntyre, and, being duly sworn, did depose and say as within written, and did sign the said within writing, as his deposition in and concerning the matter herein specified.

In witness whereof, I have hereunto set my hand and seal of office, on this said 1st of April, A. D. 1847.

Signed,

JOHN P. BIGELOW,
Notary Public.

I, James McIntyre, of the city of Boston, County of Suffolk, and Commonwealth of Massachusetts, on oath depose, that I was in the laboratory of Dr. Charles T. Jackson, on the thirtieth day of September, A. D. 1846, on which day Mr. W. T. G. Morton called to procure an India rubber bag for the purpose declared in my deposition of April 1, A. D. 1847. Mr. Morton did not to my knowledge ask for or take from the laboratory a glass tube and flask of any description whatever, which I should certainly have known if he had.

A few days after the said 30th day of September, on the 2d or 3d day of October, Mr. Morton did call and take from the laboratory the above named apparatus.

JAMES MCINTYRE.

SUFFOLK SS. Boston, May 2, 1848.—Sworn to this day by the said James McIntyre, before me,
S. W. ROBINSON,
Justice of the Peace.

Boston, May 13, 1848.

DEAR SIR :—In answer to your inquiries I would state that on the twenty-sixth day of October, A. D. 1846, Dr. Jackson sent his sister, Mrs. Ralph Waldo Emerson, to my office, to have a painful dental operation performed. She requested me, in Dr. Jackson's name, to administer the vapor of ether, but, first, to obtain Mr. Morton's permission, as he had recently purchased her brother's pecuniary interest in this discovery.

A short time afterwards I had an interview with Dr. Jackson, at which he expressed the most entire confidence in his discovery, and asserted that sulphuric ether, when judiciously administered, was perfectly harmless, and that any surgical operations might be performed upon persons subject to its influence, with complete unconsciousness of pain. Dr. Jackson stated, however, that he very much regretted having first intrusted his discovery to Mr. Morton, and having transferred to him the sole right to apply the agent, for his ignorance of its nature, and his recklessness in ordering its application, might be the occasion of injurious, if not fatal consequences.

Very respectfully,

N. C. KEEP.

DR. CHARLES T. JACKSON.

I, N. C. Keep, of Boston, in the County of Suffolk, and Commonwealth of Massachusetts, dental surgeon, having been called upon by Dr. Charles T. Jackson, depose and say, that on the twenty-eight day of November, in the year eighteen hundred and forty-six, I became associated in the business and practice of dentistry with Dr. W. T. G. Morton, of said Boston, which connection continued from that date until the thirty-first day of December following; during that period the vapor of ether was administered almost daily to our patients, for the purpose of producing insensibility to

pain in dental operations. It was his practice, during that time, to administer the ether, without any adequate provision for the admission of atmospheric air, and whenever operations were performed by other persons in the office, and under his supervision, he directed its application in the same way; by consequence of which, many of the operations, at that time, were unsuccessful, and great distress and suffering were induced. All of his apparatus for the inhalation of ether was so constructed that it was a matter, in my opinion, of absolute uncertainty, whether the patient could receive sufficient atmospheric air to prevent asphyxia. Dr. Morton appeared to be in no sense aware of the importance of admitting atmospheric air. I believe that he was not at all well acquainted with the nature, properties, and safe and proper application, of the vapor of ether, and he was certainly, in my opinion, reckless in its use, expressing the most perfect unconcern as to its effects upon the subjects of his practice, provided they were only made insensible.

Contrary to his clearly and unequivocally expressed wishes and opinion, it was my practice during the "thirty days," to make ample provision for the admission of atmospheric air, while administering the vapor of ether, and I advised the assistants to make the same provision; but they, being influenced by his directions and known wishes, did not, at all times, follow my advice. I remonstrated with Dr. Morton in reference to his mode of practice in this respect, till I found it of no avail.

With my first acquaintance with the use of the vapor of ether, for the purposes above mentioned, I was perfectly satisfied of the expediency, if not absolute necessity, of admitting atmospheric air during its inhalation, and I immediately, and have ever since, used it in that way, and in no other way.

N. C. KEEP, M. D.

COMMONWEALTH OF MASSACHUSETTS. SUFFOLK, ss. Boston, May 24, 1847.—Then personally appeared the within named N. C. Keep, and made oath that the foregoing affidavit, by him subscribed, is true. Before me,

JONA. CHAPMAN,
Justice of the Peace.

From Sharpe's Magazine.

THE LADY JANE GREY.

On hill and stream the morning beamed,
The fresh and fragrant morn,
And through the woodland cheerily
The huntsman wound his horn;
And lords and ladies, richly dight,
The gallant and the gay,
Had vowed to waken with the light
The pastime of the day.

Within her chamber, far apart,
In simple garb attired,
Of modest mien, and brow serene,
A lady sat retired.
In meditative mood she sat,
And scanned the magic page,
The dreamy and mysterious lore
Of Greece's poet-sage.

And when the sound of horn and hound
Broke full upon her ear,
"They wist not in their sports," she cried,
"What pleasure I have here:
They wist not, Plato, of the joy,
The rapture that I feel,

The 'Paradise of rare device'
Thy fantasies reveal."

The tranquil day has passed away,
Its sunny hours have sped,
And gathering clouds begin to lower
Around the fated head:
The guileless truth of early youth,
Its faith and trust remain,
But other cares and other friends
Surround the Lady Jane.

The heartless wiles of crafty men
Already hem her in.
The perils of the trusting heart
In sober sooth begin;
Before her feet adventurers lay
The glittering bauble down:
The haughtiest knee in England bends
To tender her—a crown!

"My lords," she said, "for one so young,
"T were maidenly and meet
To take your counsels for a lamp
And guide unto my feet;
Albeit, I have never sighed
Nor sought for high degree;

The gauds and glitter of a court
Have little charm for me.

"I reverence your sage resolves,
Your subtlety admit,
And weak and worthless at the best
I know is woman's wit ;
But God has fortified my soul
Against this trying hour,
And in His 'faith and fear' I shun
The path to regal power.

"How often in disast'rous feuds
Hath English blood been shed !
What living man, my lords, could bear
Its curse upon his head !
Were it not better to unite,
And bid dissension cease,
That so we might advance the reign
Of righteousness and peace ?

"May God protect our English homes,
And bless my cousin's reign—"
A sudden shout was raised without,
"Long live the Lady Jane !"
Arise, ye loyal Londoners,
And shout for Jane the Queen !
The peerless choice of England's voice !
The monarch of sixteen !

The pageant gay has passed away .
The garish dream has flown :
In sad and silent prison-room
The captive sits alone.
The wasted form, and broken heart—
The chamber in the tower—
Are these the sole memorials left
Of that brief day of power !

But ne'er was sufferer's brow, methinks,
So placid and serene ;
Angelic grace had left its trace
In her submissive mien :
"He cannot err whose hand," she cried,
"The universe sustains ;
And welcome every change and chance
His Providence ordains."

And as the parting hour drew nigh,
Her faith the stronger grew :
So young, so good, so beautiful,
So constant and so true !
In vain the zealous priest of Rome
Essayed, with honeyed tongue,
To win her from the cherished creed
To which she fondly clung.

"Sir Abbot," with a smile she cried,
"Your subtle reasons spare ;
My heart is fixed and resolute ;—
In courtesy forbear :
To argue for my faith is not
For one so weak as I ;
But in it, by the grace of God,
And for it I can die !

"And tell my cousin—since, you say,
She mourns my sinful state—
I have a ghostly counsellor
In this my mortal strait.
Tell her I freely own my fault,
And recognize her right ;
She loves me not, and soon the grave
Will hide me from her sight

"May all her subjects duteously
Incline unto her will ;
And God forgive me, if I e'er
Have wished or thought her ill :
Tell her that though the flesh be frail,
The spirit feels its might,
And longs to burst its bonds, and soar
Rejoicing into light !

"Commend me to my father's prayers,
And to my loving lord
I charge you as a Christian man
To take my dying word :
It mitigates the stroke of death,
The pang of parting pain,
To think that we who loved so well
So soon shall meet again !"

'Tis said that on the fatal morn,
From her secluded cell
She saw Lord Guildford pass to death,
And waved a last farewell :
Nay more, she saw, too plainly saw,
Beneath her window borne,
Oh sight of speechless agony !
His headless trunk return.

Her fortitude had well-nigh failed
Beneath the cruel shock ;
But calmly, martyr-like, she laid
Her head upon the block.
And long shall fame enshrine her name
Among the great and good ;
The image of heroic faith
And guileless womanhood.

And brightly her example still
Shines through the mist of years ;
The gentle and the true embalm
Her memory with tears ;
By winter fires her tale is told,
And never told in vain,
As children listen to the Life
And Death of Lady Jane.

From the Springfield Republican

THE following detailed account, the first that has been published, of the ascent of the great volcano Popocatepetl, in Mexico, was furnished by an officer of the army in Mexico, who was one of the six that succeeded in reaching the summit. This mountain, which has never been ascended since the time of Cortez, is the highest point of land in North America. The Spanish officer, who, in 1519, was the first human being that reached the summit, was rewarded by the crown of Spain for his courage and perseverance by being permitted to assume, for his coat of arms, the figure of a burning mountain :

EXPEDITION TO THE SUMMIT OF POPOCATAPETL.

An escort having been granted, and an indefinite leave given by the general-in-chief to such officers as wished to go on the expedition, we started on Monday, April 3d. Arrangements had been made with some Mexicans for pack mules to carry our provisions, bedding, &c., but we were disappointed in not getting them ; and as news had arrived, the evening before, of the ratification

of the treaty at home, we were afraid, if we remained one day longer to obtain other mules, we might have our leave countermanded; so we left about noon, with ten wagons.

As the ascent on the mountain is less precipitous on the south side, and a less depth of snow also on that slope, we took the general direction of Osumbra, which is a town near the base of the mountain, and very near the point of ascending. We stopped the first night at Ayotla, and the second at Tlaminaleco. Here we were shown some magnificent ruins; a few walls with some five or six arches, were all that remained; but the carving was more beautiful and elaborate than anything of the kind we have seen in this country. We were told by an old padre, that the work had been traced back upwards of seven hundred years; but it was evidently the work of the Spaniards, as there was a head of our Saviour in alto relievo, with figures bearing helmets and shields, as well as the crown of Spain.

On the 5th we reached Osumbra, having stopped an hour or two at Mira Flores, (see the flowers,) the day previous, where we were very hospitably entertained by Mr. Robinson, a Scotchman, who is in charge of an extensive cotton manufactory. The looms, I perceived, were all made in the United States. There were two sets of hands, one working by day and the other by night. The girls earned from four to six rials per day.

When we reached Tlaminaleco, a town of some six thousand inhabitants, we found the road somewhat impracticable for our wagons, and called on the alcalde, who furnished us with pack mules, taking charge of our wagons until we should return.

We left Osumbra on the 6th. The alcalde went with us to Atloutla, a little village some two miles further on, where we obtained two athletic young Indians as guides. Soon after leaving Atloutla, our path began ascending, and continued to do so until we encamped. The distance from Osumbra was ten miles, and we had ascended some four thousand feet above the valley. The path was a narrow train worn by mules, upon which the Indians pack wood down from the mountain sides; sometimes it was ten or fifteen feet below the surface, and our mules would get fast—again they would tumble over the side of a precipice and roll down, loads and all. These occasioned delays; still we were in camp by three o'clock. We had selected a place called "vacaria." This is nothing more than an open place in the woods, near the water, where the Indians rendezvous with their cattle, which they drive up from the plains below to graze on the grass which grows very luxuriantly in the woods on the mountain sides. We found the atmosphere quite cold here, but we were soon comfortable in our tents, with large pine fires in front of them. The view from our camp was very extensive, and towards sunset it was magnificently beautiful. Far above us, on the mountain, it was snowing quite hard; to our right, and far below us, was a large dark cloud.

We could hear it thunder and see the lightning, while the rain fell in torrents over nearly the whole valley of Mexico. Where we were, and to our left, extending into the terra caliente, the sun was shining brightly. Towards night the clouds from above enveloped us, and we had sleet and snow, which continued all night.

Our party numbered nearly one hundred—twenty-five officers of different corps, four or five citizens, thirty-five dragoons, and some forty footmen. We left the camp early the next morning. The ground was covered with snow, and the weather quite unsettled. After a distance of some three miles, we reached the limits of vegetation; tall pine trees, some of them one hundred or one hundred and twenty feet high, extended almost to this line. We were now about five thousand feet below the summit, and, as we advanced, the ascent grew more difficult. The wind had been rising from the time we left camp, and now blew quite fresh. It was very cold, and in half an hour we were in a severe snow storm. The further we advanced, the more difficult was our respiration. It was necessary to rest every four or five minutes. We continued climbing until about one o'clock, when our party, which numbered, when we left camp, about thirty, had become reduced to only five. The remainder had turned back, one by one, as they had become exhausted with cold and fatigue. One of the officers became so chilled that his mind wandered, and we could with difficulty prevent him from lying down in the snow to sleep.

As we had succeeded thus far in ascending but a little more than one third of the way, and the day being more than half gone, we concluded to give up our attempt and make another trial on a fair day. We reached camp about four o'clock, having been exposed for more than five hours in a most terrible snow storm. We soon found that the fatigues of climbing were but a small part of our troubles; for we discovered, as we stood around our fires, that one officer had his nose frozen, and others their fingers. We were somewhat discouraged by this; still we made arrangements to try again the following day. Before sundown, one began to complain of an inflammation of the eyes; and soon every one of the party, who had been exposed, was suffering from very acute pain in the eyes. Our camp presented a singular scene that night and on the following morning, for there were some twenty whose faces were very much swollen, and the eyes so inflamed that we could not sleep. Some of us thought that our eyesight was totally gone. The morning found us no better, and we broke up our camp to descend to the valley. It was laughable to see so many of us groping our way down some ten miles through the defiles of the mountain.

There were two foreigners—Italians, I believe—who had come out from the city with us, for the purpose of ascending the mountain with our party. They had remained in camp, on account of the storm, during our trial, and, instead of go-

ing down to the valley with us, they started upwards, thinking they would be able to succeed in reaching the summit. We encamped that night at the base of the mountain, and reached Amecamecu the next day. There the Italians joined us. They had succeeded in reaching the "pecacho del Frayle," a peak some two thousand feet from the summit, when one of them began spitting blood, and they were compelled to descend. After some discussion, the majority of our party decided that it was impossible to reach the top, and that another attempt was useless. Some half a dozen of us thought we would make the trial. Our eyes were improving; we bathed them frequently with a solution of sugar of lead, and provided ourselves with green spectacles, and gauze for our faces. The next evening, at six o'clock, found six of us, with some twenty-five infantry, encamped two or three miles beyond the "vacaria," near the limit of vegetation; whilst the remainder of our party had gone, a portion to Mexico, to give an account of our defeat, and the balance to Cuernavaca, to visit a celebrated cave, which would in some measure repay them for their disappointment here.

We left our camp on the morning of the 11th, before 3 o'clock; our eyes were nearly well, and our faces not much swollen. The skin had entirely peeled off. Still we had several advantages over our previous trial, for we were much further advanced; there was a prospect of a fair day, and we had our eyes and faces protected. We rode our mules some two miles, until the ascent became too great for them, when we sent them back to camp. Our route now lay for some three or four miles over a surface of black sand. This distance, on our previous trial, was covered with snow. It had melted, and the sand having absorbed the water, was frozen quite hard. We had little difficulty in getting along over this. By sunrise, we had reached an elevation of about two thousand feet above our camp, and the scene below us was beautiful beyond description. The mountain east a shadow, which extended not only across the entire valley to the horizon, but it reached beyond into the sky, where its outline was so distinctly defined, that even the shadow cast by the smoke, as it rose from the crater, was easily distinguished.

As we advanced our progress began to be impeded by the snow, and the atmosphere was so rare that we breathed with great difficulty. The snow varied in depth from a few inches to three or four feet; sometimes the surface was frozen, and as smooth as glass. We had provided ourselves with long poles with iron pikes on the ends; they were invaluable in preventing us from slipping, and in sounding the depth of the snow in the frequent chasms. From five to eight steps were as many as we could take without becoming exhausted. We all suffered severely from an acute pain over the eyes; and our faces, particularly our lips, were of a deep bluish-black color. As we approached the summit, our progress became still more slow; two and three steps required a rest of

one or two minutes. But by very hard work, by ten minutes past two, we were standing on the highest point of land in North America, upwards of 17,800 feet above the level of the sea. After catching breath, we gave three cheers, and planted a small flag on the very summit of Popocatepetl. The crater, upon the very mouth of which we were standing, was about five hundred feet in depth, and about four hundred yards in diameter. The mouth was an ellipse, being formed by an oblique plain to the east with the highest part towards the west, the side towards Puebla being we thought some two hundred feet lower than the opposite side. The sides were nearly vertical, and a horizontal section at almost any height from the bottom would be a circle. The walls might be compared to three vertical cylinders, one within the other, the first rising one hundred or one hundred and fifty feet, where there was an irregular horizontal bench of a few yards in breadth which was intersected by the second cylinder, which rose about two hundred feet more; here was another horizontal bench, when the third cylinder rose to the top of the cone. Smoke was pouring out from several places on the sides of the crater, from the bottom, and from the bed of a large mass of sulphur two large volumes rose. We perceived no heat, and as small patches of snow were lying on the bottom, it was evident that little or none existed.

The view from our position was grand and sublime beyond description. We had the advantage of a clear day, for there was scarcely a cloud above the horizon. Orizaba and the Nevada of Toluca, both covered with perpetual snow, were distinctly visible, rising like two large rocks from the ocean. The vast field below us looked like the sea, with slight undulations. Even Iztaccihuatl, which from the city of Mexico looks almost or quite as elevated as Popocatepetl, now appeared far below us. Puebla with its entire valley was visible. A slight mist extended across the valley of Mexico, which in some measure concealed the city, although the lakes, Penon, and other objects could be distinguished. We had hardly gratified our curiosity above half an hour, when each one of the party became more or less sick, both from our elevated position and from the fumes of sulphur which we were breathing. We found our throats swollen, and some headache, and a sickness at the stomach. This compelled us to begin our descent, although reluctantly, for, as one of our soldiers remarked, we had never been so near heaven before. We collected a few specimens of lava and turned our faces towards the valley. Soon our sickly sensation left us, and when we reached camp, which was soon after two o'clock, we were perfectly well, with the exception of headaches.

The Indians would not believe us when we told them we had reached the top. They examined our heads, and said it was impossible, for no one could go there without having horns growing from the head. Others asked us what the mountain said to us. Our guides only went as far as the

region of perpetual snow, no money or persuasions on our part could induce them to go further. One of our men got separated from us in descending, and we have not heard of him since. We suppose he must have descended into the valley of Puebla and probably reached that city.

Out of twenty-five who attempted the ascent, but six officers, viz., Lieut. Stone, ordnance; Lieut. Anderson, dragoons; Capt. Bomford, 8th infantry; Capt. Fowler, 5th infantry; Lieuts. Kirkham and Buckner, 6th infantry, and an English gentleman, Mr. Baggally, succeeded. We reached Mexico after an absence of twelve days, and found that all our friends were prepared to sympathize with us on our failure, but when the truth was known we were congratulated on every side. This is the first excursion to the summit of any of the snow mountains in Mexico since our army has been here, and the first by any American to Popocatepetl, the highest mountain in North America. K.

From Sharpe's Magazine.

POOR MARGUERITE.

SECOND PART TO "THE PEOPLE'S RECOLLECTIONS OF NAPOLEON."

"SAY, mother, who is yonder weeping,
Leaning the cottage door beside?
That aged woman, feebly creeping,
With no kind hand her steps to guide.
Now say, good mother, why she weeps,
Whene'er of him you tell!"

"Children, old Marguerite's husband sleeps
Where many a brave man fell,
Beyond those distant mountain tops,
In Italy on battle day."

"Poor Marguerite! ay, she always stops,
Good mother, hearing what you say,
And many a tear she drops."

"He was the hero of the war,
A leader young and bold;
And oft his victories afar
The people's praises told.
Great fame he won, but many bled—
Some wept like her, when others smiled.
They turned away to mourn their dead—
The parent, wife, and child;
But she was not all lonely then,
She had a gallant son—
The hero lost his bravest men,
But yet what glorious battles won!"

"That brave youth, was he slain!"

"Ah! yes! her son was killed in fight,
His comrades told of his renown,
How well he fought, how, in their sight,
Dying, he struck his foeman down.
Oh! it was brave! his poor young wife
Looked up no more—her infant, too,
Soon pined away its little life:
It drooped, poor babe, as if it knew
That it was fatherless—they died—
Yet still she had two boys:
Two bold stout youths, her hope and pride.
To lose them both!—short are life's joys."

"Say, mother, how they died."

"When that great army through our village
Marched with such music and such state,

The eldest left his peaceful tillage,
And vowed to share the hero's fate.
He, too, was killed—with his last breath
He shouted, 'Glory to our Chief!'—
Poor maiden! how she mourned his death—
Lisa, who loved him; and her grief,
And Marguerite's, too; and never more
Has Lisa smiled, nor has she spoken,
Save idiot words—her heart was broken."
"She weeps at Marguerite's door."

"The aged often live through sorrow
That younger hearts will break;
Marguerite will weep again to-morrow,
For her lost children's sake;
Lisa, who should have been his bride,
She lived not long, but sunk away;
And Marguerite asks by her dear side
Her weary bones in earth to lay.
But let us tell the hero's fame,
And talk of him and of his glory."
"Oh! mother, when we hear his name
And think of her and her sad story,
His praise were sin and shame."

"Ah! my good children, 'tis, I fear,
No more than others felt.
In every village, far and near,
Widows and orphans dwelt—
In those proud days of victory,
Beggings their bread they came,
From door to door, while joyful nigh,
The people praised his name.
And his they called Heaven's brightest star—
Oh! e'er it set, what thousands more
Had perished in the snows afar!"

"Mother, why told you not before
The wickedness of war!"

LOOK TO YOUR FEET.

OF all parts of the body, there is not one the clothing of which ought to be so carefully attended to as the feet. The most dependant part of the system, this is the part in which the circulation of the blood may be the most readily checked; the part most exposed to cold and wet, or to direct contact with good conducting surfaces, it is the part of the system where such a check is most likely to take place. Coldness of the feet is a very common attendant on a disordered state of the stomach; and yet disordered stomach is not more apt to produce coldness of the feet, than coldness of the feet is apt to produce disorder of the stomach; and this remark does not apply only to cases of indigestion, but to many other disorders to which man is liable. Yet do we see the feet of the young and the delicate clad in thin-soled shoes, and as thin stockings, no matter whether it is summer or winter-time—no matter whether the weather is dry or damp, or whether the temperature of the atmosphere is warm or cold. But this is not the whole of the evil. These same feet are frequently, at different times of the same day, differently covered as to the stoutness of the shoes and their soles, and very often likewise as to the thickness of the stockings. I have often found, on investigating into the origin of cases of disease, that it has been a common practice to go out of doors in the forenoon, the feet being protected with lambs'-wool stockings, and warm and thickly-soled boots; and to sit in the afternoon at home, only having the feet covered with silk stockings and thin satin shoes. I have so

often found this to be the case, that it would hardly surprise me were the practice found to be almost universal among the females of the middle and upper ranks of society. To this common, and sufficiently inconsiderate practice, I have traced many cases of incurable disease. To this alone may be ascribed many a case of functional disturbance; this lays the foundation for many of those derangements by which the first inroad is made into the constitution, the first step taken in undermining the health; the first of that succession of changes brought about, by which the young, and the lovely, and the healthy, are converted into wasted victims of consumption, or become martyrs to other maladies as fatal, although less common. I am sufficient of a Goth to wish to see thin-soled shoes altogether disused as articles of dress; and I would have them replaced by shoes having a moderate thickness of sole, with a thin layer of cork or felt placed within the shoe, over the sole, or next to the foot. Cork is a very bad conductor of heat, and is therefore to be preferred; if it is not to be had, or is not liked, felt may be substituted for it. The extreme lightness of the cork, the remarkable thinness to which it may be cut—its usefulness as a non-conductor not being essentially impaired thereby—and the inappreciable effect it has on the appearance of the shoe—all seem to recommend its use for this purpose in the strongest manner. I think that neither boots nor shoes should be used without this admirable provision against cold feet. There is sufficient objection to all shoes made of waterproof or impervious materials; they are apt to prove much too heating and relaxing, interfering with the due escape of the cutaneous exhalations. Thin shoes ought only to be used for the purpose of dancing, and then they ought only to be worn while dancing. The invalid or dyspeptic ought assuredly never to wear thin shoes at other times. As to the common practice of changing thin shoes for warm boots, and *vice versa*, it is a practice that is replete with danger, and therefore rash, and almost culpable.—*Dr. Robertson.*

A PLEA FOR THE MOLES.—The "Essex Herald" publishes the following letter from the Rev. G. Wilkins to a farmer, who wrote to him inquiring how the wireworm had been exterminated in the reverend gentleman's land. It contains much sound, though, we dare say, unpalatable doctrine to the owners of smooth lawns and trim-bedded gardens:—"Some ten years since, when I came to my living, and commenced cultivating the little land I hold, it was, I may say, full of wireworms. Nothing could have been worse, for my crops were in some places ruined by them entirely. What, then, did I do? I adopted a plan which I recommended and published in periodicals many years since—namely, encouraging moles and partridges on my lands. Instead of permitting a mole to be caught, I bought all I could, and turned them down alive; and soon my fields, one after another, were full of mole-hills, to the amusement of all my neighbors, who at first set me down for half-lunatic; but now several adopt my plan, and are strenuous advocates of it. My fields became exactly like a honeycomb; and this continued even among my standing and growing and ripening crops; not a mole was molested, but I still bought more. This summer I had fourteen brought, which I turned down; but they were not wanted; I have nothing for them to eat—all that moles live upon is destroyed—and so,

poor things, they must starve, or emigrate to some distant lands, and thus get bowstrung by savage men, whom they aim to serve. Adopt my plan, and it will be sure to answer. If you have a nest of partridges, also encourage them; all the summer they live on insects, on wireworms, &c.; and consider how many millions a covey will destroy in a single summer. Again, always remember that moles feed upon insects, and of which the wireworm is the chief; if you doubt this, open a mole, and peep into his stomach. Again, do not fear that moles injure your crops, either in a field or in a garden; it is a low and vulgar error to suppose that they root up young corn; they never go anywhere until the wireworms have first destroyed the plants, and then, innocent things, they are punished for others' faults! If you do not like to see their hills, knock them about with a hoe, as I did; it is a healthful amusement, and they will do your lands good. Do not despise my plan because the farmers will not adopt it in your neighborhood; farmers adopt nothing till driven to it, and nothing that is new and good."

AUSTRALIAN COLONIES.—The Athenæum mentions two schemes for remedying the great disparity of sexes now existing in our Australian colonies in process of organization. The one is a subscription by the colonists themselves, for carrying over 20,000 young women, daughters and sisters of artisans, who are to pay a small sum as a sort of guarantee of their respectability. The other is a Miss Burdett Coutts' institution, of which we have before spoken, and called her "Home" for penitent females. A large house has been taken at Shepherd's Bush, and fitted up at an expense of £1,200 for their reception. The institution is under the more immediate management of Mr. Charles Dickens, and Mr. Chesterton, the governor of Coldbath-fields prison. The female penitents are to be sent out to the colonies, after a course of trial and probation here, as free women; provision being made for them until they enter into service or marry. Every kind of domestic art—cooking, sewing, straw plaiting, etc.—is to be taught in the "Home," which can render them valuable as wives or servants. Great care is taken in the selection of the inmates; penitence, sobriety, honesty, health, being the qualifications demanded in the applicant for admission.—*Guardian.*

EGYPT.

"Dinanzi a me non fur cose create,
Se non eterne, ed io eterno duro."

DANTE.

On the deep rock of ages have I set
My everlasting pyramid, and look round
From its great throne on oceans without bound
Time shoreless, shifting sands, and realms as yet
Growing to being. Of all here who met—
Persian, Greek, Roman, Arab—who hath stood!
All, all have drifted onward by my base,
And here I hold amidst their surge my place!
Before me things were not, or such as could
Endure like me, eternal. The broad Nile,
Young as the day it leaped to life, and made
Life wheresoe'er it moved—the godlike sky,
Star-written book unfathomable—the pile
Of mountain-walls around—these shall not fade.
They were—and are—and shall be!—*So shall I.*
Chambers' Journal.

PROSPECTUS.—This work is conducted in the spirit of Littell's Museum of Foreign Literature, (which was favorably received by the public for twenty years,) but as it is twice as large, and appears so often, we not only give spirit and freshness to it by many things which were excluded by a month's delay, but while thus extending our scope and gathering a greater and more attractive variety, are able so to increase the solid and substantial part of our literary, historical, and political harvest, as fully to satisfy the wants of the American reader.

The elaborate and stately *Essays of the Edinburgh Quarterly*, and other *Reviews*; and *Blackwood's* noble criticisms on Poetry, his keen political Commentaries, highly wrought Tales, and vivid descriptions of rural and mountain Scenery; and the contributions to Literature, History, and Common Life, by the sagacious *Spectator*, the sparkling *Examiner*, the judicious *Athenaeum*, the busy and industrious *Literary Gazette*, the sensible and comprehensive *Britannia*, the sober and respectable *Christian Observer*; these are intermixed with the Military and Naval reminiscences of the *United Service*, and with the best articles of the *Dublin University*, *New Monthly*, *Fraser's*, *Tailor's*, *Ainsworth's*, *Hood's*, and *Sporting Magazines*, and of *Chambers' admirable Journal*. We do not consider it beneath our dignity to borrow wit and wisdom from *Punch*; and, when we think it good enough, make use of the thunder of *The Times*. We shall increase our variety by importations from the continent of Europe, and from the new growth of the British colonies.

The steamship has brought Europe, Asia, and Africa, into our neighborhood; and will greatly multiply our connections, as Merchants, Travellers, and Politicians, with all parts of the world; so that much more than ever it

now becomes every intelligent American to be informed of the condition and changes of foreign countries. And this not only because of their nearer connection with ourselves, but because the nations seem to be hastening through a rapid process of change, to some new state of things, which the merely political prophet cannot compute or foresee.

Geographical Discoveries, the progress of Colonization, (which is extending over the whole world,) and Voyages and Travels, will be favorite matter for our selections; and, in general, we shall systematically and very fully acquaint our readers with the great department of Foreign affairs, without entirely neglecting our own.

While we aspire to make the *Living Age* desirable to all who wish to keep themselves informed of the rapid progress of the movement—to Statesmen, Divines, Lawyers, and Physicians—to men of business and men of leisure—it is still a stronger object to make it attractive and useful to their Wives and Children. We believe that we can thus do some good in our day and generation; and hope to make the work indispensable in every well-informed family. We say *indispensable*, because in this day of cheap literature it is not possible to guard against the influx of what is bad in taste and vicious in morals, in any other way than by furnishing a sufficient supply of a healthy character. The mental and moral appetite must be gratified.

We hope that, by "*winnowing the wheat from the chaff*," by providing abundantly for the imagination, and by a large collection of Biography, Voyages and Travels, History, and more solid matter, we may produce a work which shall be popular, while at the same time it will aspire to raise the standard of public taste.

TERMS.—The *LIVING AGE* is published every Saturday, by E. LITTELL & Co., corner of Tremont and Bromfield sts., Boston; Price 12½ cents a number, or six dollars a year in advance. Remittances for any period will be thankfully received and promptly attended to. To insure regularity in mailing the work, orders should be addressed to the office of publication, as above.

Clubs, paying a year in advance, will be supplied as follows:—

Four copies for	\$20 00
Nine " "	\$40 00
Twelve " "	\$50 00

Complete sets, in fifteen volumes, to the end of 1847, handsomely bound, and packed in neat boxes, are for sale at thirty dollars.

Any volume may be had separately at two dollars, bound, or a dollar and a half in numbers.

Any number may be had for 12½ cents; and it may be worth while for subscribers or purchasers to complete any broken volumes they may have, and thus greatly enhance their value.

Binding.—We bind the work in a uniform, strong, and good style; and where customers bring their numbers in good order, can generally give them bound volumes in exchange without any delay. The price of the binding is 50 cents a volume. As they are always bound to one pattern, there will be no difficulty in matching the future volumes.

Agencies.—We are desirous of making arrangements in all parts of North America, for increasing the circulation of this work—and for doing this a liberal commission will be allowed to gentlemen who will interest themselves in the business. And we will gladly correspond on this subject with any agent who will send us undoubted references.

Postage.—When sent with the cover on, the *Living Age* consists of three sheets, and is rated as a pamphlet, at 4½ cents. But when sent without the cover, it comes within the definition of a newspaper given in the law, and cannot legally be charged with more than newspaper postage, (14 cts.) We add the definition alluded to:—

A newspaper is "any printed publication, issued in numbers, consisting of not more than two sheets, and published at short, stated intervals of not more than one month, conveying intelligence of passing events."

Monthly parts.—For such as prefer it in that form, the *Living Age* is put up in monthly parts, containing four or five weekly numbers. In this shape it shows to great advantage in comparison with other works, containing in each part double the matter of any of the quarterlies. But we recommend the weekly numbers, as fresher and fuller of life. Postage on the monthly parts is about 14 cents. The volumes are published quarterly, each volume containing as much matter as a quarterly review gives in eighteen months.

WASHINGTON, 27 DEC., 1846.

OF all the Periodical Journals devoted to literature and science which abound in Europe and in this country, this has appeared to me to be the most useful. It contains indeed the exposition only of the current literature of the English language, but this by its immense extent and comprehension includes a portraiture of the human mind in the utmost expansion of the present age.

J. Q. ADAMS.